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ABSTRACT

To comply with the Carl D. Perkins Vocational Education Act of 1984 requirements, the Michigan State Advisory Council for Vocational Education reviewed data from the Michigan Department of Education to determine the accessibility of vocational education to secondary and postsecondary students as it relates to enrollments. The evaluation component also included the gender and racial/ethnic composition of students currently participating in vocational education, as well as the participation of special populations (handicapped, disadvantaged, adults, single parents/homemakers, students in nontraditional programs, and criminal offenders). The study found significant differences in accessibility of vocational education to students, based on geographical location. It also found that the enrollment of females and males in vocational education appears to be balanced, although this may be due to various areas balancing each other. Overall, trends in secondary education seem to be in the direction of enrolling students in programs that are nontraditional to their gender, although progress in this direction is much slower in postsecondary education. The study also found that vocational education at both levels is serving minorities in proportion to the statewide high school population; however, enrollments vary by program areas. Finally, the study found that only limited numbers of persons are being served in any of the special population categories (Author/KC)

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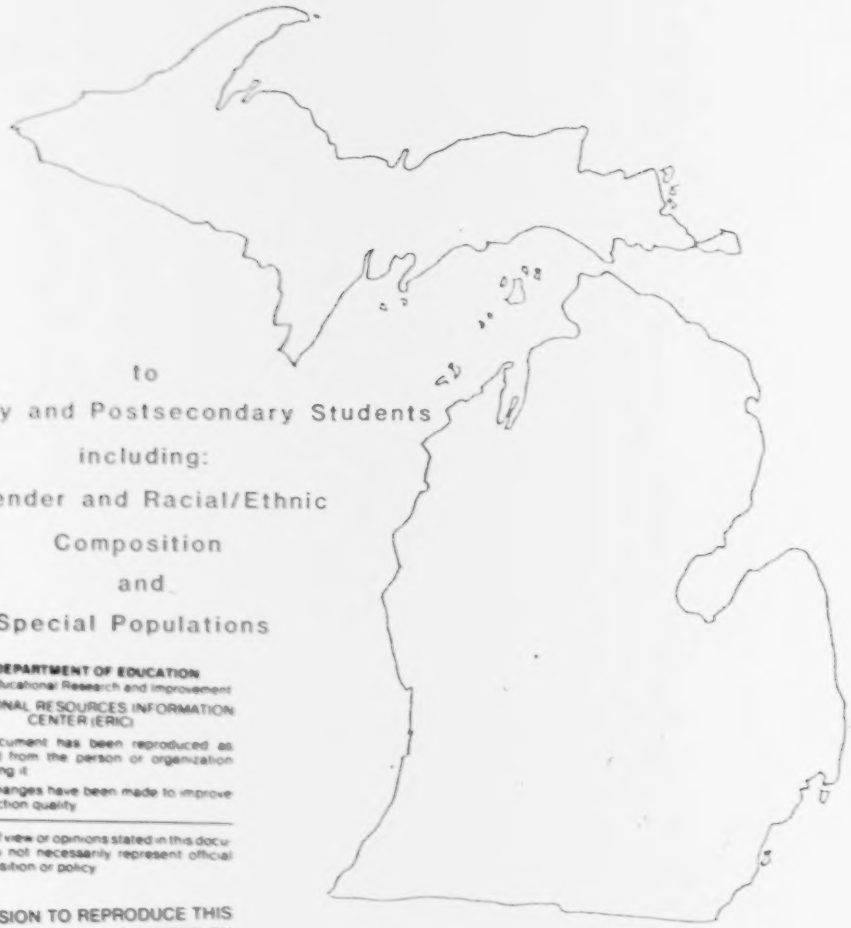
REPORT:

ON THE ACCESSIBILITY OF VOCATIONAL-TECHNICAL EDUCATION



to

Secondary and Postsecondary Students

including:

Gender and Racial/Ethnic

Composition

and

Special Populations

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State Advisory Council for Vocational Education

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THE ACCESSIBILITY of VOCATIONAL-TECHNICAL EDUCATION to:

Secondary and Postsecondary Students

including:

Gender and Racial/Ethnic

Composition

and

Special Populations

Michigan
State Advisory Council for Vocational Education

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Introduction

The mission of the Michigan State Advisory Council for Vocational Education encompasses the two broad themes of the Carl D. Perkins Vocational Education Act of 1984 which are to assist the state to make vocational education programs accessible to all persons and to provide quality programs that result in improved productivity and economic growth for Michigan.

One of the eleven requirements of State Councils is to evaluate at least once every two years the vocational education delivery systems in terms of its adequacy and effectiveness in achieving the purpose of the Perkins Act. Another responsibility includes reporting on the extent to which special populations are provided with equal access to quality vocational education programs.

As an initial step to address these two tasks, the Council reviewed data available from the Michigan Department of Education to determine the accessibility of vocational education to secondary and postsecondary students as it relates to enrollments. This evaluation component also includes the gender and racial/ethnic composition of students currently participating in vocational education, as the well as, the participation of special populations, i.e., handicapped, disadvantaged, adults, single parents/homemakers, students in non-traditional programs, and criminal offenders. Future evaluations will include the adequacy and effectiveness of vocational programs, facilities/equipment, financing, personnel and job placement/continuing education.

The Council would like to thank its Leadership Development Project (LDP) interns for their assistance in soliciting and organizing the data included in this report. The 1986 summer interns were Janet Burns, Petoskey Public Schools, Elizabeth Hackett, Durand Public Schools, and Ricardo Medina, Averill Career Opportunities Center, Saginaw.

Chapter I

"The Status of Secondary Student's Accessibility to Vocational-Technical Education Including Gender and Racial/Ethnic Composition"

Background

In May, 1978, a report was published entitled, "The Inequality of Vocational Education Opportunities for Michigan High School Students."[1] This document was generated by a group of vocational educators who had tried unsuccessfully to establish area-wide intermediate school district administered vocational education delivery systems. One of the recommendations coming out of this report indicated that the first step in compiling the data on the present status of vocational education in Michigan had been undertaken, therefore ".....A task force focusing on providing more equal access to vocational education needs to be appointed by the State Superintendent of Public Instruction....." It was with this recommendation in mind that the Michigan State Superintendent of Public Instruction established the Michigan Vocational Education Study Task Force in October, 1979. This Task Force was charged with the responsibility of accomplishing the following three tasks:[2]

1. Defining the status of Michigan's vocational education delivery system for high school students.

2. Identifying alternatives for addressing potential inequalities and unmet needs of students resulting from the current delivery system.

3. Suggesting specific steps for implementing an improved delivery system or systems.

Legislative Framework[3]

The Contenders' Report and the establishment of the Task Force did not in themselves indicate lack of progress. History shows the impact of federal dollars for vocational education which were made available in the Vocational Education Act of 1963 and the Vocational Education Amendments of 1968 pushed Michigan along with the rest of the nation into an era which reflected a rethinking of the impact which vocational education, if readily available to all, could have upon society. Concurrent with these developments, the State of Michigan amended Public Act 151 (The Intermediate School District Act) to include a provision for the establishement of area vocational-technical programs as a part of the legitimate intermediate school district responsibility. This complemented the existing potential of Public K-12 School Districts to provide broad-based vocational education programs to secondary students in Michigan. In addition, it broadened the funding and operating options available to these agencies.

With these alternatives and the establishment of added cost funding for vocational education early in the 1970's, expansion of the vocational education delivery system in Michigan began to gain momentum, however, the recession which occurred in 1973-74 took its toll on education in general and vocational education in particular. Its primary effect was the reduction of availability of dollars not only to expand the vocational delivery system but also to maintain the quality and quantity of the systems.

In 1976 Public Act 94-482 was enacted which revised the Vocational Education Act of 1963 along with the Higher Education Act of 1965. It was also during this time that the anti-tax efforts began to emerge on the national scene; the result being that the constituents of the State of Michigan passed the Headlee Amendment which further restricted the availability of financial support for education.

The problem addressed by the Superintendent's Task Force was to identify and recommend alternative strategies which when implemented would allow vocational education to fulfill the mission set forth in the State Plan.

The Task Force Report was completed by June, 1980 and included twenty-five significant recommendations. However, very little was done with the report or the recommendations, due to a major recession in Michigan's economy, and declining student enrollments--the time was one of survival and not one of improvement. Since then the new Carl D. Perkins Vocational Education Act (1984) was passed which placed more emphasis on special populations and program improvement. At the same time there has also been a public outcry for a change in how the entire K-12 educational system is presently being financed in Michigan.

Procedure

As indicated in the introduction, a review of enrollment data was conducted by SAC-VE, which is currently available from the Michigan Department of Education. In order to conduct the review relative to the accessibility of vocational education, the State Plan Committee of the State Advisory Council for Vocational Education, started with the mission identified in the 1986-88 State Plan for Vocational Education[4] which states that:

> "Persons of all ages in all Michigan communities will have ready access to high quality vocational and technical education which is consistent with their interests and abilities, realistic in the light of actual or anticipated opportunities for gainful employment and which, to the extent possible, is consistent with the State's economic development strategies and specific job needs of employers."
>
> Goal I under this mission states that, "Persons with differing sex, age, racial/ethnic background, socioeconomic disadvantage, limited English proficiency, physical and mental capabilities, and geographical location will have access to vocational-technical education and training or retraining and shall not be excluded from such programs because of any distinguishable personal characteristics."

An issue that became evident was that there were no measurable criteria for the mission or goal to determine progress, success, or lack of progress. At best, available data could/may be compared from year to year for progress or lack thereof, or to determine trends over a period of 5-10 years.

Review of Data

In order to determine the status of Secondary Student accessibility to vocational education the data was broken down into five areas:

1. Enrollment: Number of students served, includes both 9-12 and 11-12 grades.

2. Geographical Location: Number of students served by the 53 Career Education Planning Districts.

3. Program offerings: Number of students served by the six wage earning content areas in agriculture, business/office, distributive education, health, occupational home economics, trade/industrial, and the one non wage earning program, consumer/homemaking (CHE).

4. Gender: Number of male and female students served.

5. Racial/Ethnic Background: Number of American Indian, Asian American, Black, Hispanic and White Students served.

The following are abbreviations used in the report:

CEPD = Career Education Planning District

CHE = Consumer/homemaking education

ISD = Intermediate School District

Total Voc Ed = includes consumer/homemaking with wage earning program enrollments

W/E = Wage earning vocational education programs

Note: The most current complete data available when the review commenced was based on the 1984-85 school year. Where comparisons or exceptions occur the year(s) will be identified.

Secondary Vocational Education Enrollments

Facts and Findings: (See Graph A, page 13)

- o 33.9% of Michigan's grade 9-12 students are served by vocational education (includes consumer/homemaking). 170,055
- o 20.7% of Michigan's grades 9-12 students are served by wage earning vocational education. 104,037
- o 39.8% of Michigan's grades 11-12 students are served by wage earning vocational education. 90,513
- o 4.2% Decline in 9-12 wage earning enrollments. (4,602). However, this is due to the drop in 11-12 grade enrollments. There has been a small increase in 9-10 wage earning enrollments.
- o .6% Decline in 11-12 total education population served by vocational education.
- o Consumer/homemaking is the the only program area with an increased enrollment. All other program area enrollments declined.

Conclusions

A review of the data indicates that wage earning vocational education enrollments are declining at about the same rate as the total education 9-12 population. This has been a trend for the past nine years.

While there has not been any criteria established in the State Plan for a target population to be served by vocational education, the Michigan Department of Education, Vocational-Technical Education Services, informally used 33% of 9-12 population.

The Michigan Vocational Education Study Task Force in 1980 recommended that the State Board of Education establish a goal equivalent to sixty percent (60%)* of the service area's 11th and 12th grade enrollments unless that service area could justify a lower level based on student need through its planning process. The State Advisory Council for Vocational Education believes that this recommendation is as valid today as it was in 1980.

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*Seventy-five percent (75%) or more of all high school graduates do not complete a baccalaureate degree according to Dale Parnell in his book The Neglected Majority (1985).

Secondary Vocational Education Enrollments by Geographical Location

Facts and Findings: (See Map B, page 14, and Chart C, page 15)

- o 81.2% is the highest percent of 11-12 wage earning students served by any CEPD.
- o 23.3% is the lowest percent of students served by any CEPD.
- o 57.9% is the range between the CEPD serving the highest and lowest number of 11-12 students in vocational education.
- o 39.8% of Michigan's 11-12 Secondary Enrollment is served by wage earning vocational education. This is the statewide average.
- o 29 CEPDs are serving students in vocational education above the statewide average.
- o 24 CEPDs are serving students in vocational eduation below the statewide average.
- o 4 CEPDs have consistently (5 years) served over 50% of their 11-12 grade students with vocational education.
- o The ten highest serving CEPDs are spread fairly evenly across the State.
- o Six of the ten high serving CEPDs adjoin a low serving CEPD.
- o Only one high serving CEPD is located in a major metropolitan area of the State.
- o High serving CEPDs are just as likely to be in rural areas of the State as are the 10 low serving CEPDs.
- o Eight out of the ten highest serving CEPDs have area vocational centers, however, not one of the ten lowest serving CEPD's has an area vocational center.

The State Advisory Council for Vocational Education found the above Facts and Findings so intriguing that they requested a telephone interview to be conducted with the CEPD vocational-technical specialist for each of the ten high and the ten low serving CEPDs. The specialists were asked to respond to open-ended questions relating to factors that may be affecting their present situation. The telephone surveys were conducted between July and November, 1986 by Ms. Elizabeth Hackett a SAC-VE LDP intern. All twenty of the CEPD specialists participated in the interviews.

SUMMARY
OF

Telephone Interview with Twenty CEPD Specialists on The Accessibility of Vocational Education to Secondary Students

Eight of the ten highest serving CEPDs had area vocational centers and fifty percent had vocational millages. None of the lowest serving CEPDs had an area vocational center nor a vocational millage. One of the low serving CEPDs had recently passed a vocational millage to build an area center. The majority of low serving CEPDs had tried for millages two or three times but each time they were defeated.

Three of the high serving CEPDs were collaborating with other agencies or programs, leveraging funds and services to recruit students and fund programs. It was evident in the high serving CEPDs that there was effective communication between area center staff with local district administrators, counselors, students and parents. Recruitment programs were initiated with eighth or ninth graders and followed up annually. These CEPDs tended to have more administrators available to coordinate recruitment, programs and support services.

Low serving CEPDs left most of their recruitment and guidance to the local school districts. The communication between vocational education and local schools was inconsistent and not part of a total plan. These CEPDs tended to lack a coordinated delivery plan, vocational administrators and the visibility an area center can provide.

About half of both types of CEPDs had experienced a drop in vocational enrollments. A decline in the total 9-12 population, scheduling conflicts and increased academic requirements were identified as the causes for the declining enrollments. More of the high serving CEPD's were developing approaches to getting academic credit/equivalencies for vocational courses and providing employability development plans for students than the low serving CEPDs. The current emphasis by the State Board of Education on increased academic requirements was frustrating many of the CEPD specialists from both groups.

In the high serving CEPDs, the counselors at the home schools tended to promote vocational education and the students could witness success stories from graduates of the programs. In the low serving CEPDs vocational classes were not deemed as important as academics, the success stories were not as apparent, and the school districts often maintained rivalries between schools offering shared-time programs.

Most of the high serving CEPDs felt that on the whole their staff had the reputation of providing quality programs. Financial cutbacks and low enrollments had affected the quality of the programs in the low serving CEPDs. The high serving CEPDs had more vocational student organizations integrated with their programs than low serving CEPDs.

There was not a significant difference in the geographic location or size of the low and high serving CEPDs. When quality programs existed and vocational education was promoted, transportation was not a large issue. Students in the high and low serving CEPDs spent comparable amounts of time on a bus to get to their vocational classes.

There was a significant difference in the reported activity level of the advisory committees between the high and low serving CEPDs. The high serving CEPDs usually met twice a year with the committees and involved them in curriculum revision and equipment selection. The low serving CEPDs said that they have advisory committees for their programs but that the activity level varied. It should be noted that high serving CEPDs generally had area centers which centralized the resources of the community. The low serving CEPDs had to rely more on local activity in each school district.

Six out of the ten high serving CEPDs had common school calendars whereas only two out of the ten low serving districts had them. High serving CEPDs generally had good communication with the local districts and consistent support. The low serving districts had sporadic support and communication was sometimes a problem.

Two Successful Profiles

Newaygo (CEPD 20) Vocational Programs (Serves 81.2% of Students)

Newaygo has consistently served the largest percentage of students with vocational education in the state. They have an area center that houses all of their wage earning programs except Production Agriculture. The local schools also provide Consumer Home Economics Programs. Newaygo operates at least two sections of every course except Ag Mechanics. The average number of students per section is 17, well below the maximum of 22 students per section. The reimbursement rate per student hour varied from $0 to $239 per course. The data processing program is also offered as an extended day session to help accommodate student demand and schedules. Local school districts within the CEPD have consistently encouraged their students to attend the area center.

Gratiot and Isabella (CEPD 18) Vocational Programs (Serves 70.7%) of Students

CEPD 18 uses primarily a shared-time delivery system with an area center designated as part of Mt. Pleasant High School. The local schools also house Consumer Home Economics, Agriculture and Secretarial programs. The area center uses extended school days and extended school years to help accommodate student needs. They also have some adult students integrated in with high school students. They offer 22 different programs within the CEPD which include uncommon programs such as: Radio/TV, Commercial Painting and Interior Treatment Services. The administrators have built a strong shared-time network within the CEPD by assigning 2/5 of a student's state aid to the receiving district. There is no community college within the CEPD which the administrators think has encouraged more adults to take advantage of the secondary vocational education programs.

Conclusions

There is a significant difference in the accessibility of vocational education to students based on geographic location--a range of 58% from high to low. From the evidence it appears on the surface that having an area vocational center and possibly a vocational millage does make a difference. In addition to these two major factors, some combination of the following components could also positively impact the proportion of high school students served by vocational education:

- o A CEPD/ISD coordinated delivery plan and system for vocational education with administration and financing provided to support the plan.
- o A common school calendar by CEPD/ISD.
- o A good communication system including information on vocational education for local schools, boards, administrators, counselors, teachers, students, parents, and the community.
- o Guidance programs and counselors prepared with information on vocational education including labor market information and experience with business, industry and labor.
- o An individualized education/employment plan for each student by the ninth grade and reviewed annually.
- o The utilization of advisory committees to review curricula, determine equipment and facility needs, assess programs, and assist with job placement.
- o Establish vocational student organizations as part of the program delivery system.

Those CEPD's that have been successful should be utilized to assist low serving CEPD's.

Secondary Vocational Education Enrollments by Program Area

Facts and Findings: (See Chart D, page 16)

- o Distributive Education had an increased enrollment of 11% (1,898 students) for 1985-86 and Consumer and Homemaking had a 7.2% (4,811 students) enrollment increase. All other vocational education program enrollments declined during this period.
- o Since the 1977-78 school year, to 1985-86, the statewide 9-12 population has declined 21%. The decline in vocational education content areas has been extremely diverse, from a minimal 8% decline in health to a 42% decline in Agriculture over the same nine years.

Conclusions

Although statewide enrollment data would indicate that vocational education enrollment was declining in proportion to the decline in the 9-12 total education enrollment, this indication is superficial. Program areas with enrollment increases or decreases that are significantly higher or lower than the average decline of the total statewide enrollment are usually hidden.

Those program areas with enrollment significantly below the statewide average should be targeted for immediate study and appropriate steps taken based on the assessment.

Secondary Vocational Education Enrollments by Program Area and Gender

Facts and Findings: (See Graphs E, page 17, and F, page 18)

- The enrollment of females and males in Vocational Education appear to be balanced, i.e. (have a 75/25 ratio or better). Total wage earning Vocational Education Enrollment has 53% males and 47% females. Total Vocational Educational Enrollment has 42% males and 58% females.

- However, the general appearance of balance by gender may be due to the fact that the Vocational Educational Content Areas balance each other out. Four of the content areas are considered in balance and three are out. Agriculture, Distributive Education, Consumer/Homemaking and Occupational Home Economics are in balance. Business/Office, Health and Trade/Industry are out of balance.

- It appears that there is a trend in the various content areas to enroll students in programs that are non-traditional to their gender.

- Agriculture had 23.9% female enrollment in 1977-78 and 27.1% female enrollment in 1984-85 for a 3.2% increase.

- Occupational Home Economics programs had 28.9% male enrollment in 1977-78 and 35.2% male enrollment in 1984-85 for a 6.3% increase.

- Business/Office had 10% male enrollment in 1977-78 and 18% male enrollment in 1984-85 for an 8% increase.

- Trade/Industry had 13.2% females in 1977 and 15.4% in 1984 for a 2.2% increase.

- Distributive Education had a 56.9% female enrollment in 1977-78 and 58.4% in 1984-85 for a 1.5% increase.

- The percent of change in the content areas by gender, range from a low of 1.5% to a high of 8% during an eight year period of time. (1978-1985)

- All of the three content areas considered out of balance for gender, have increased their non-traditional enrollment--Business/Office has increased male enrollment by 8% and Health Occupations has increased male enrollment by 6%. However, Trade/Industry has only increased female enrollments by 2%.

Conclusions

Overall, progress has been made during the past nine years to enroll students in vocational program areas that are non-traditional for their gender. Those individuals and groups responsible for this trend should be congratulated. However, if progress is going to continue, those program areas such as Trade and Industry where change is much slower may need to receive additional attention and technical assistance.

It is also important to note that when enrollments by gender are totaled for a program area, the enrollment data of specific programs within an area is hidden. For example, the greatest number of females in Agriculture remain clustered in Horticulture; the greatest number of males in Business/Office remain clustered in data processing; the greatest number of males in wage earning Home Economics remain cluster in Food Service, whereas very few males ever participate in Child Care; the greatest numbers of males in Health are primarily in the Health occupation cluster; and the greatest number of females in Trade/Industry remain significantly clustered in Cosmetology. Once again specific program/courses may need to be targeted for additional assistance if non-traditional enrollments are to increase.

Racial-Ethnic Make-Up of Vocational Education Enrollments (9-12)

Facts and Findings: (See Graph G, page 19)

- In 1984-85, minorities comprise 19.7% of the statewide high school population and 20.2% of the total vocational enrollment.
- Asian Americans represent 0.7% of the statewide high school population and 0.4% of vocational education enrollment.
- American Indians represent 1.0% of the statewide high school population and 0.8% of vocational education enrollment.
- Hispanics represent 1.6% of the statewide high school population and 1.6% of vocational education enrollment.
- Blacks represent 15.5% of the statewide high school population and 16.6% of vocational education enrollment.
- White students represent 81.2% of the statewide high school population and 80.6% of vocational education enrollment.
- Blacks are the only minority with a higher proportion of students served by vocational education in comparison to the total black high school population.

- o Asian Americans, American Indians, and White students have a lower proportion of students served by vocational education in comparison to the total high school population for each of these minorities.

Vocational Education Enrollments by Content Area by Race

Facts and Findings: Black Students (See Graph H, page 20)

- o Black Students make up 14.9% of the wage earning vocational education enrollment which is 0.6% less than the statewide Black population.

- o Four of the seven vocational education program areas serve a higher proportion of Black Students versus the statewide high school population. Wage earning Home Economics serves the highest proportion of Black Students (23.3%) or 7.8% over the high school Black population.

- o Two of the vocational education program areas serve a lower proportion of Black Students. Trade/Industry serves 4% less than the statewide high school Black population and Agriculture serves only 1.3% Blacks or 14.2% less than the statewide high school Black population.

Facts and Findings: Hispanic Students (See Graph I, page 21)

- o Three of the seven vocational education program areas serve a higher proportion of Hispanic Students. Wage earning Home Economics serves the highest proportion of Hispanic Students (2.4%).

- o Four of the vocational education program areas serve a lower proportion of Hispanic Students. Consumer Home Economics, Distributive Education and Health serve 1.3% and Agriculture serves 0.8%.

Facts and Findings: American Indian Students (See Graph J, page 22)

- o Health Occupations is the only vocational education program area to serve a higher proportion of American Indian Students (1.1%).

- o Four of the vocational education program areas serve a lower proportion of American Indian Students. Distributive Education serves the least (0.5%).

Facts and Findings: Asian American Students (See Graph K, page 23)

- o None of the vocational education program areas serve Asian Americans in proportion to the statewide high school population. Three content areas serve 0.5%, three serve 0.4% and Agriculture serves 0.1% versus .7% of the total Asian population.

Facts and Findings: White Students (See Graph L, page 24)

- White Students make-up 82.1% of wage earning vocational education enrollment which is 0.9% more than the statewide high school White enrollment.
- White Student enrollment in vocational education is below the high school White enrollment percentage of 81.2% in all program areas except Agriculture (97.1%) and Trade and Industrial (84.0%).
- Health Occupations is serving the lowest proportion (76.8%) of White Students.
- Agriculture is serving the highest proportion (97.1%) of White Students.

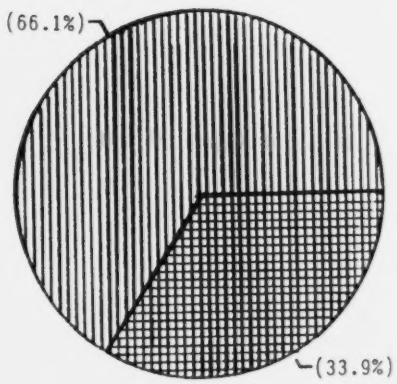
Conclusions

Overall, vocational education at the secondary level is serving minorities in proportion to the statewide high school population, which is encouraging.

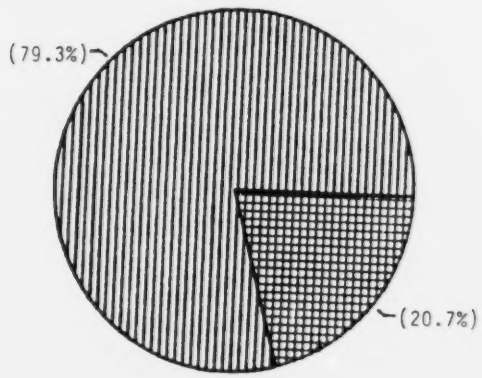
Once again there is a problem of hidden data between program areas. If additional progress is to be made, a program area such as wage earning Home Economics, which is serving a higher proportion of Black students by 8% and Hispanics by 0.8% (which is a 50% increase over the 1.6% total minority population) need to be studied to determine why Black and Hispanic Students are clustered in this program area.

Agriculture and Trade/Industry which serve a lower proportion of Black Students by 14.2% and 4% respectively, should also be targeted for further study. Agriculture programs are primarily located in rural areas of the state where there are fewer minorities, which may or may not explain the situation. An attempt should be made to determine the reason for an extreme higher/lower proportion of minorities served by vocational education program areas.

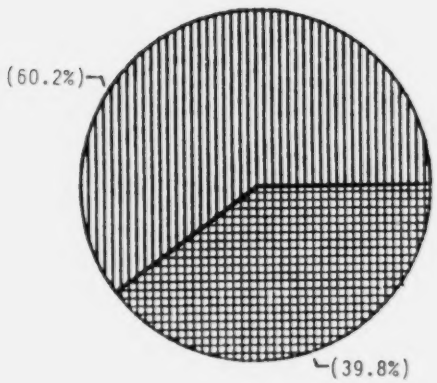
PROPORTION OF VOCATIONAL EDUCATION ENROLLMENTS TO TOTAL EDUCATION ENROLLMENTS (1984-85)



NON VOC ED (9-12)
TOTAL VOC ED (9-12)



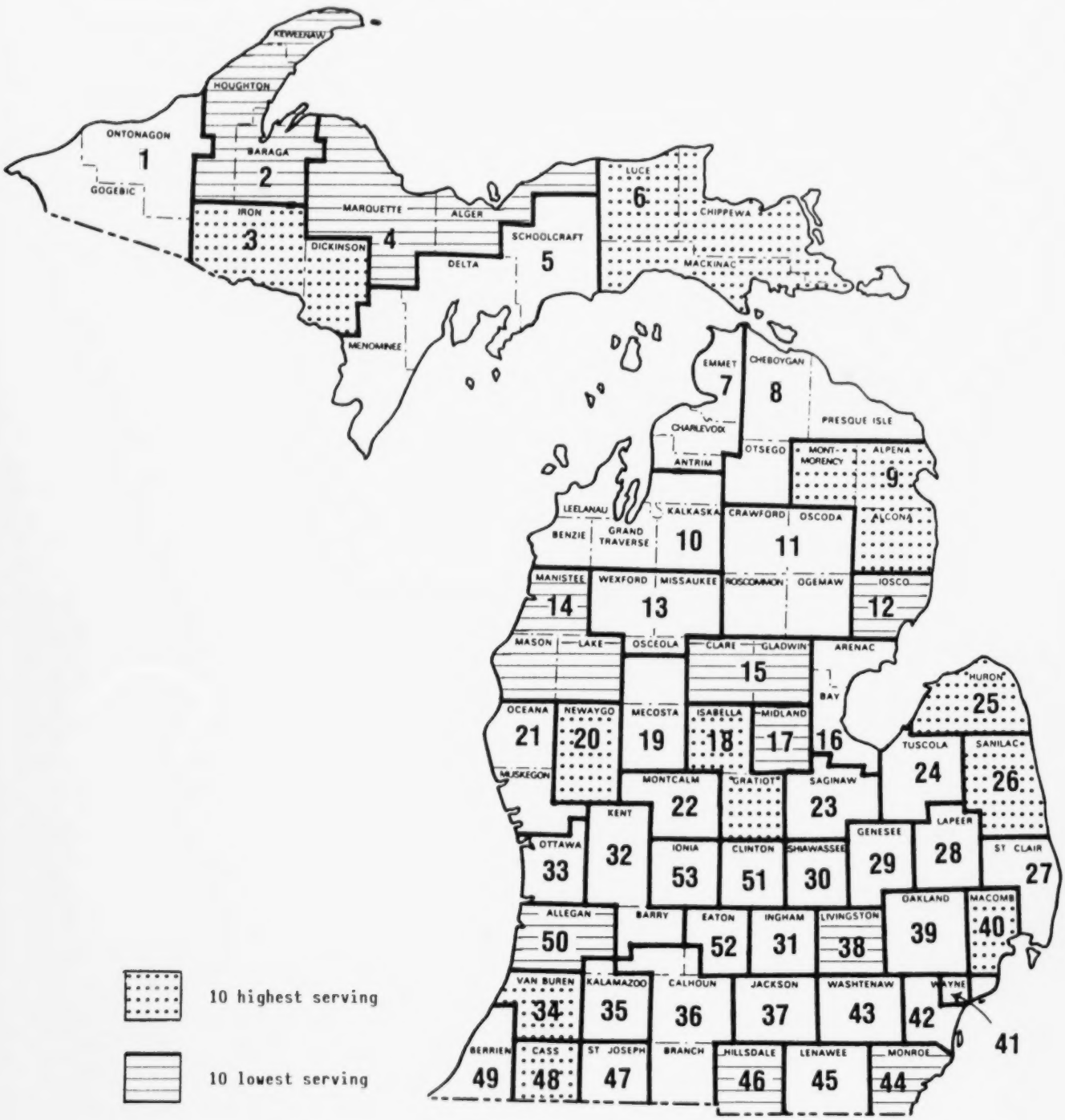
NON VOC ED (9-12)
WAGE EARNING VOC ED (9-12)



NON VOC ED (11-12)
WAGE EARNING VOC ED (11-12)

CAREER EDUCATION PLANNING DISTRICTS

CEPDs serving the ten highest and ten lowest proportion of
11-12 grade students (1984-85) in wage earning vocational education



PERCENT OF 11-12 GRADE STUDENTS SERVED BY WAGE-EARNING VOCATIONAL EDUCATION IN EACH CEPD 1984-85

Percent Increments	CEPD	11-12 Voc.Ed. Enrollment	Actual Percent Served
Above 80%	20 Newaygo	840	81.2%
79-70%	18 Gratiot-Isabella	1,507	70.7%
69-60%	26 Sanilac	712	60.4%
59-50%	09 Alpena-Montmorency-Alcona	760	56.5%
49-40%	34 Van Buren	1,024	49.4%
	25 Huron	514	47.8%
	03 Dickinson-Iron	509	47.3%
	06 Eastern U.P.	586	47.0%
	48 Lewis Cass	449	46.6%
	40 Macomb	9,348	46.4%
	28 Lapeer	1,000	46.3%
	45 Lenawee	1,218	46.0%
	29 Genessee	5,763	45.6%
	24 Tuscola	950	45.3%
	13 Wexford-Missaukee	557	44.8%
	37 Jackson	1,566	44.5%
	01 Gogebic-Ontonagon	358	44.3%
	23 Saginaw	2,755	43.4%
	52 Eaton	883	43.3%
	22 Montcalm	752	43.2%
	33 Ottawa	1,885	43.0%
	31 Ingham	3,021	42.4%
	05 Delta-Schoolcraft	950	41.7%
	08 Cheboygan-Otsego-Presque Isle	626	40.6%
	39 Oakland	10,982	40.3%
	36 Calhoun	2,212	40.3%
	27 St. Clair	1,555	40.3%
	11 Crawford-Oscoda-Ogemaw-Roscommon	520	40.1%
	07 Charlevoix-Emmet	521	40.0%

39.8% STATEWIDE AVERAGE
29 CEPD's OR 54% ARE ABOVE AVERAGE

39-30%	32 Kent	3,896	39.3%
	16 Bay-Arenac	1,562	39.3%
	53 Ionia	564	37.0%
	49 Berrien	1,544	36.8%
	19 Mecosta-Osceola	483	36.4%
	51 Clinton	620	36.2%
	21 Oceana-Muskegon	1,678	35.9%
	41 Detroit	4,929	35.5%
	42 Wayne	10,063	35.4%
	35 Kalamazoo	1,566	35.2%
	10 Traverse Bay Area	1,013	33.3%
	47 St. Joseph	533	32.8%
	43 Washtenaw	1,867	32.7%
	30 Shiawassee	777	31.6%
	04 Marquette	641	31.0%
	38 Livingston	941	30.8%
	12 Iosco	272	30.2%
29-20%	50 Allegan	534	27.9%
	46 Hillsdale	305	27.8%
	44 Monroe	957	26.5%
	15 Clare-Gladwin	338	25.6%
	17 Midland	532	23.7%
	14 Mason-Lake	312	23.7%
	02 Baraga-Houghton-Keweenaw	263	23.3%

VOCATIONAL EDUCATION ENROLLMENT BY CONTENT AREA
SELECTED YEARS

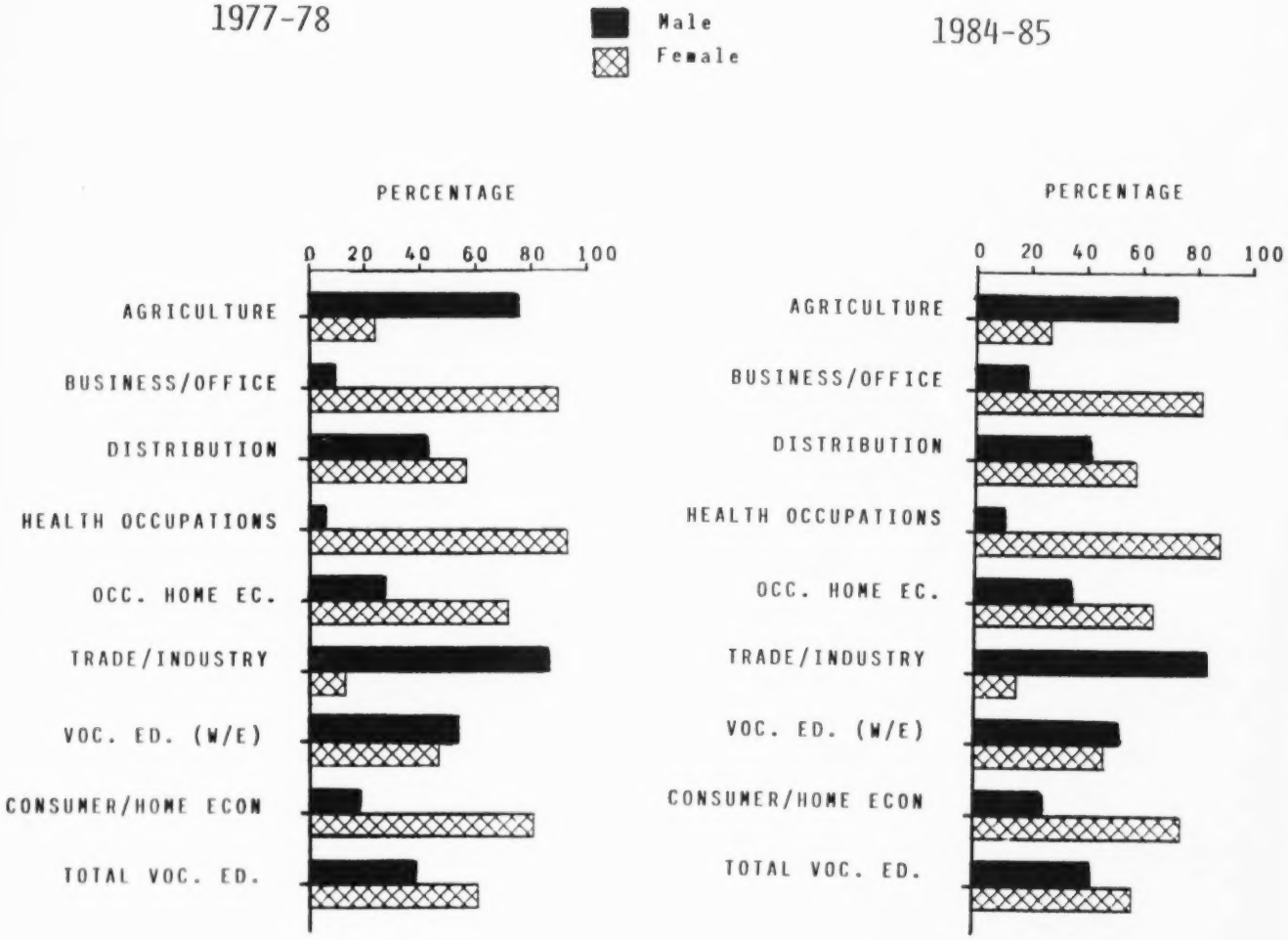
	1977-78	1981-82	1984-85	1985-86	% Change 1978-86
Agriculture	14,408	11,314	9,018	8,423	-42%
Business/Office	24,335	21,778	21,373	20,467	-16%
Distribution	20,131	18,148	15,650	17,458	-13%
Health	8,163	8,857	7,620	7,476	- 8%
Occupational Home Economics	13,523	9,825	10,242	9,773	-28%
Trade/Industry	48,471	48,004	40,134	39,455	-19%
Total Vocational Education (Wage Earning)	129,031	117,928	104,037	103,052	-20%
Consumer/Homemaking	91,295	85,684	66,018	70,829	-22%
Total Vocational Education	220,326	203,610	170,055	173,881	-21%
Total General Education	632,511	542,782	502,265	499,890	-21%

VOCATIONAL EDUCATION ENROLLMENTS BY PROGRAM AREA AND GENDER

Graph E

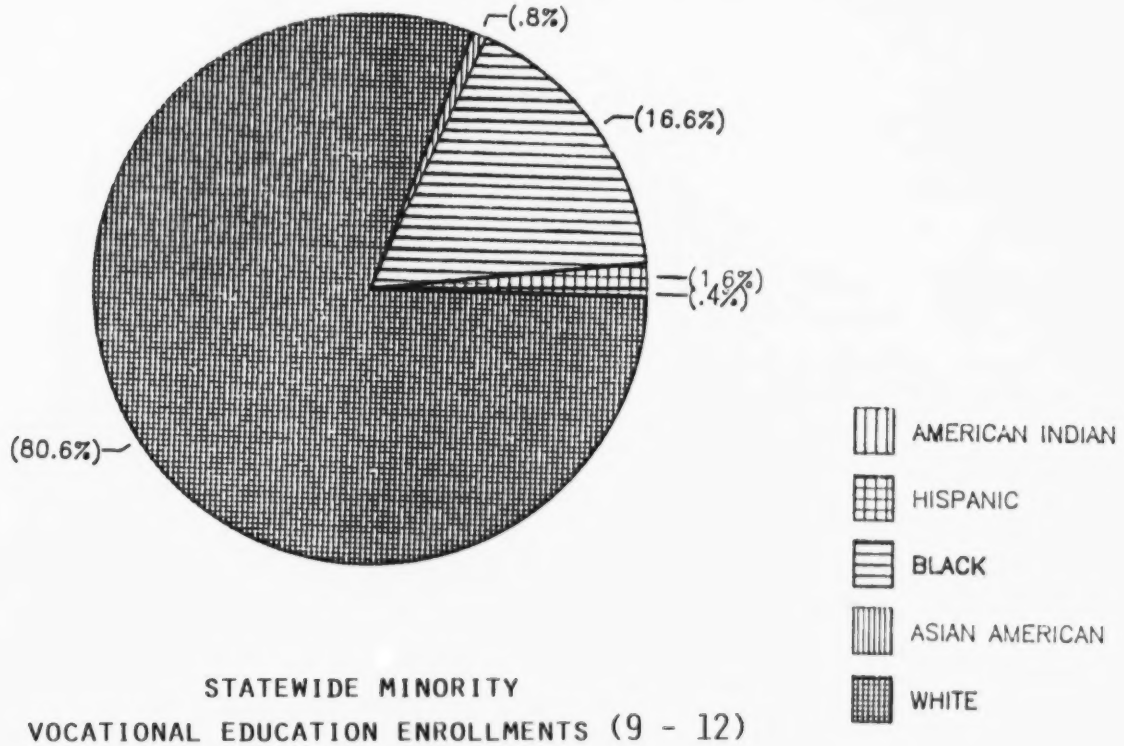
(1984-85)

VOCATIONAL EDUCATION ENROLLMENTS BY PROGRAM AREA AND GENDER
(SELECTED YEARS)

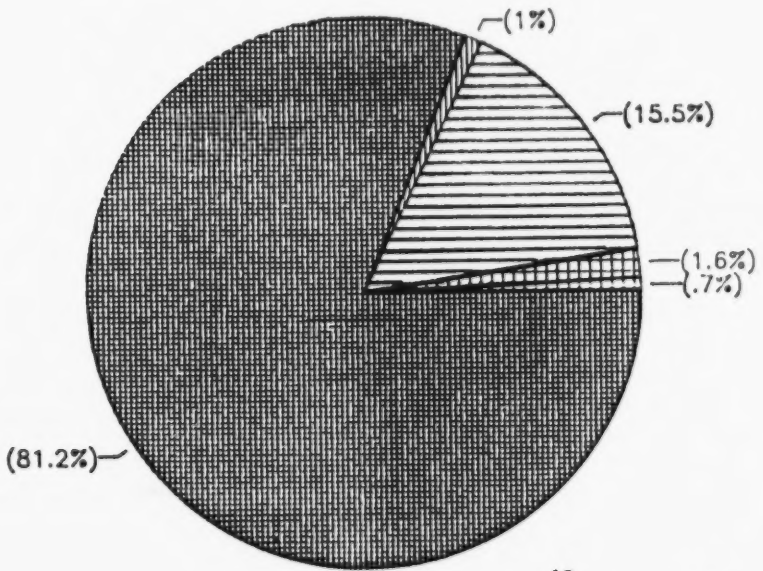


COMPARISON OF MINORITY ENROLLMENTS IN VOCATIONAL EDUCATION TO MINORITY ENROLLMENTS IN TOTAL EDUCATION (1984-85)

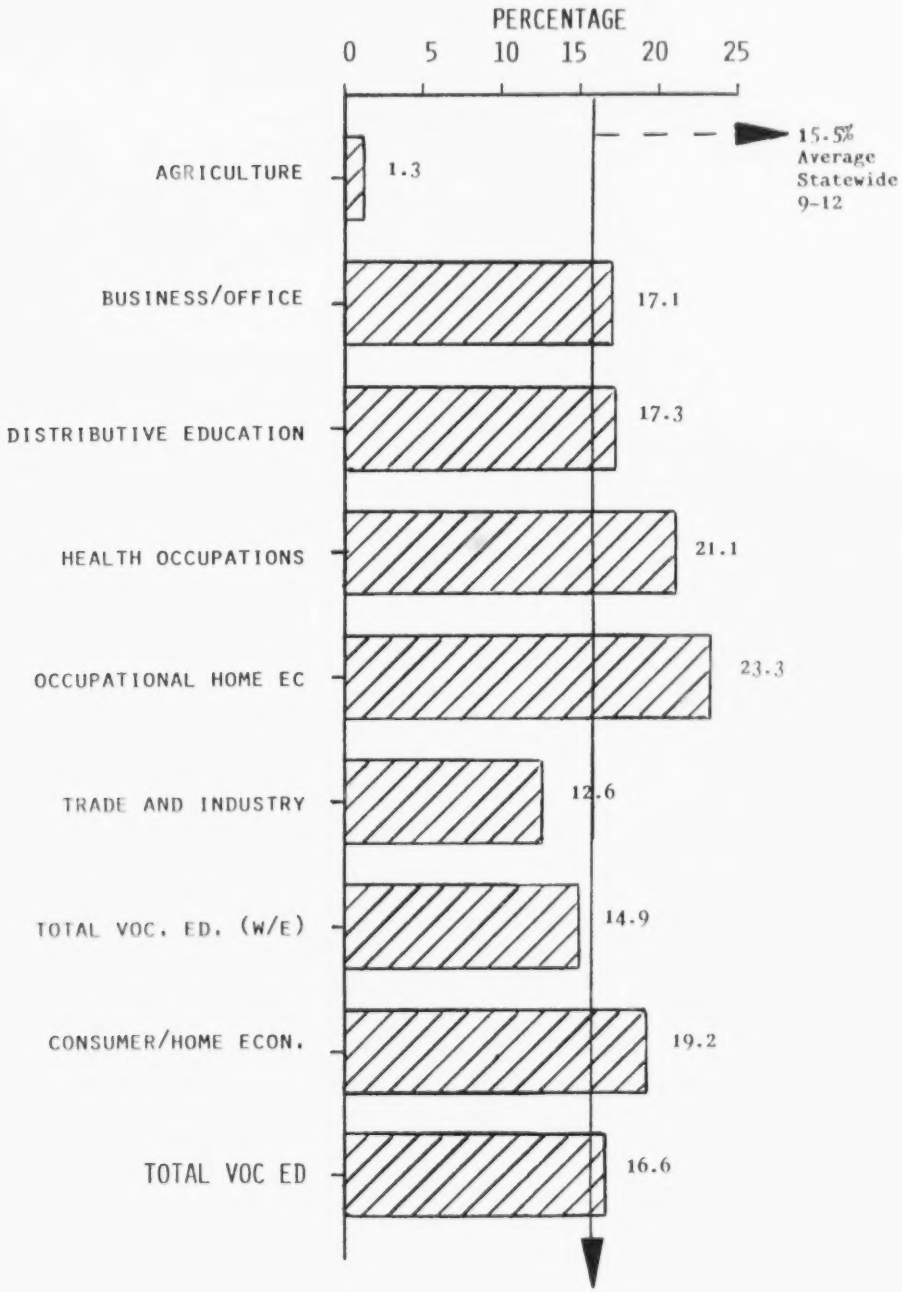
STATEWIDE MINORITY EDUCATION ENROLLMENTS (9 - 12)



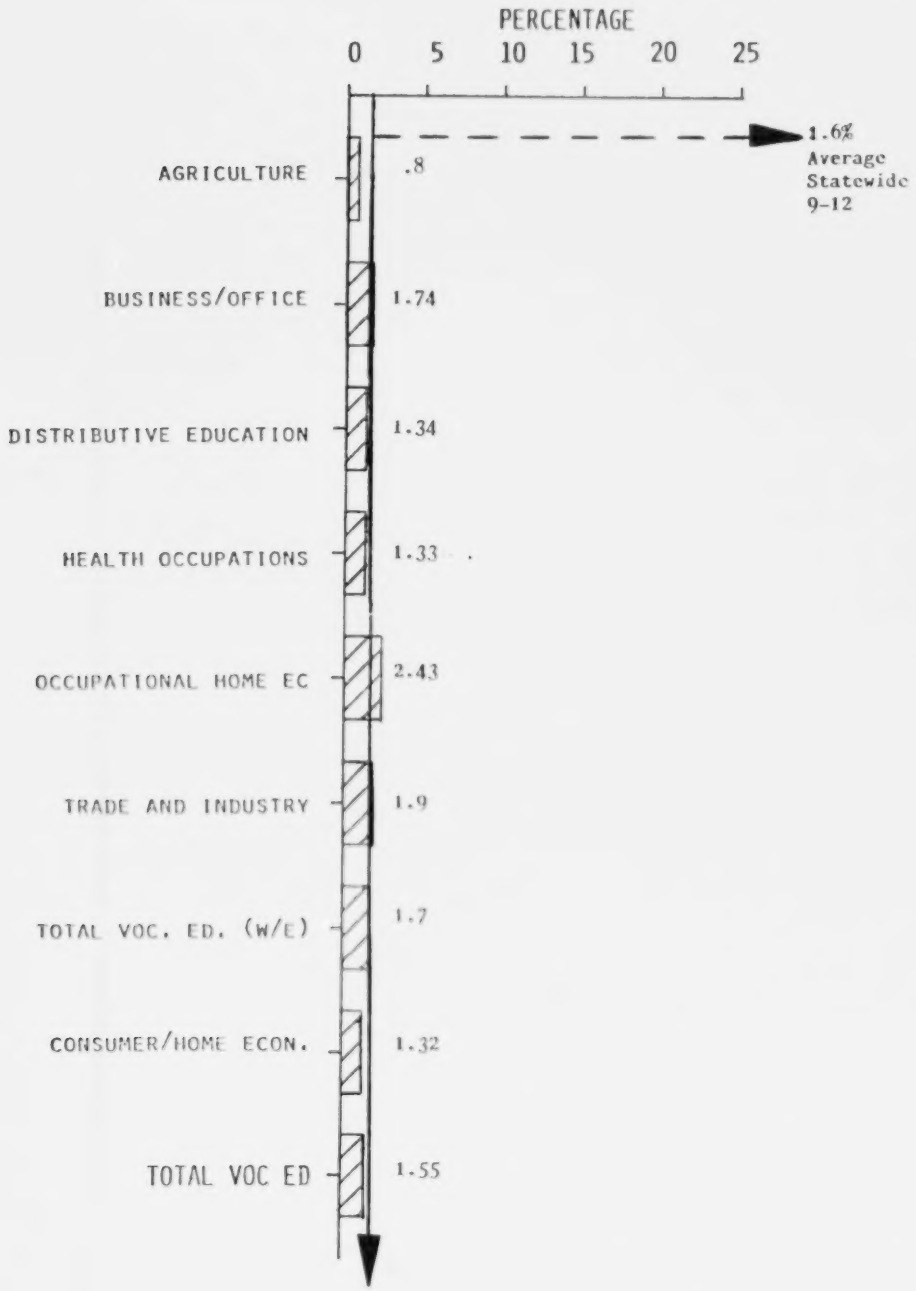
STATEWIDE MINORITY VOCATIONAL EDUCATION ENROLLMENTS (9 - 12)



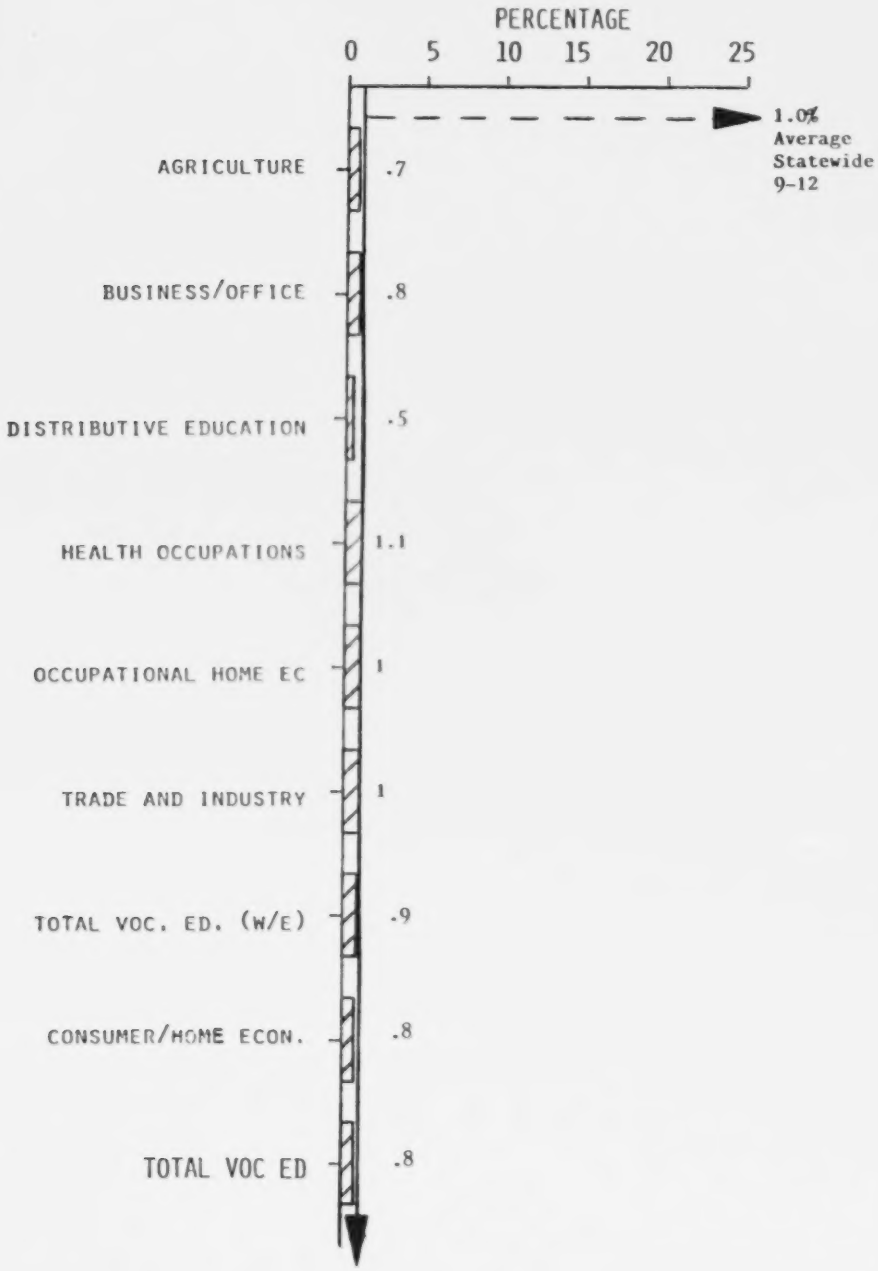
BLACK STUDENT ENROLLMENT BY VOCATIONAL EDUCATION PROGRAM AREAS
(1984-85)



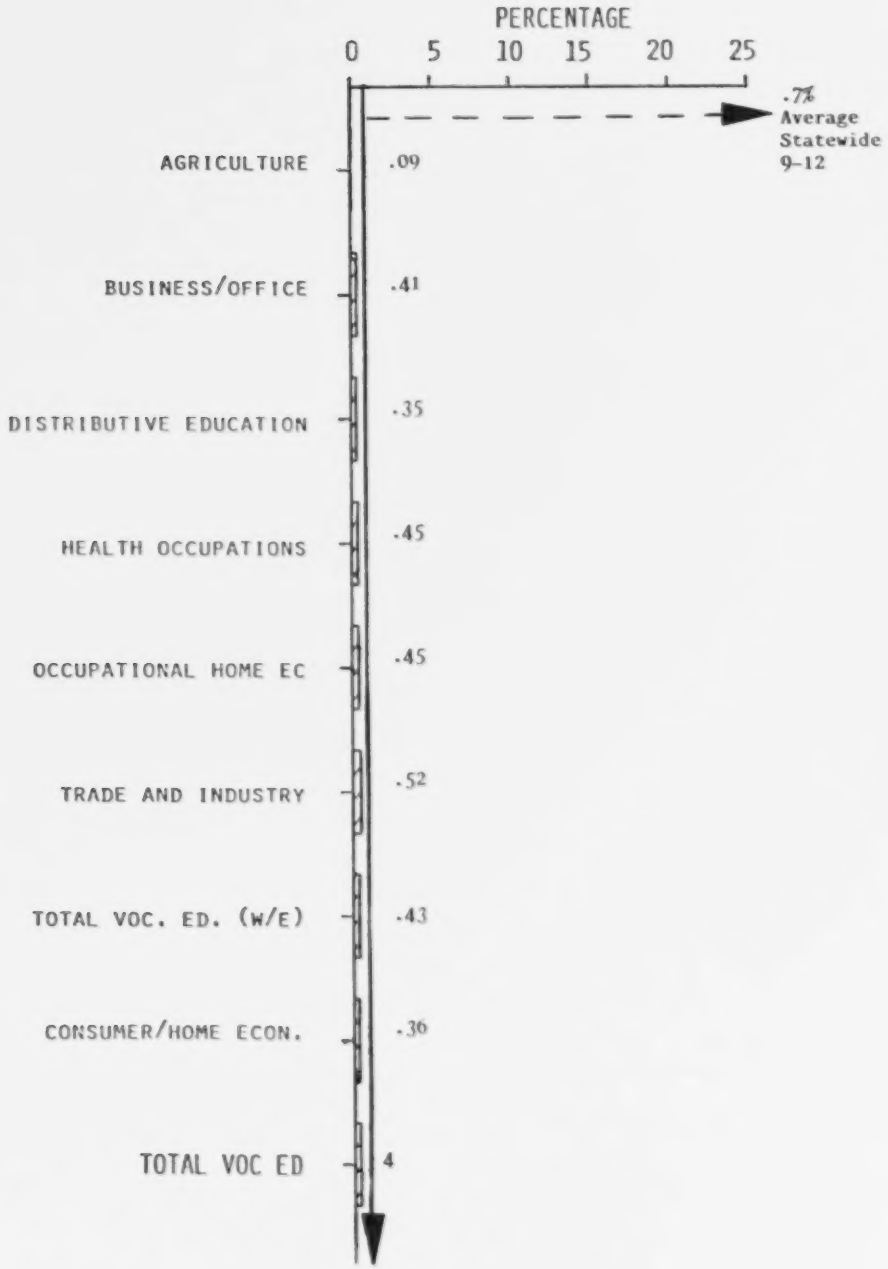
HISPANIC STUDENT ENROLLMENT BY VOCATIONAL EDUCATION PROGRAM AREA (1984-85)



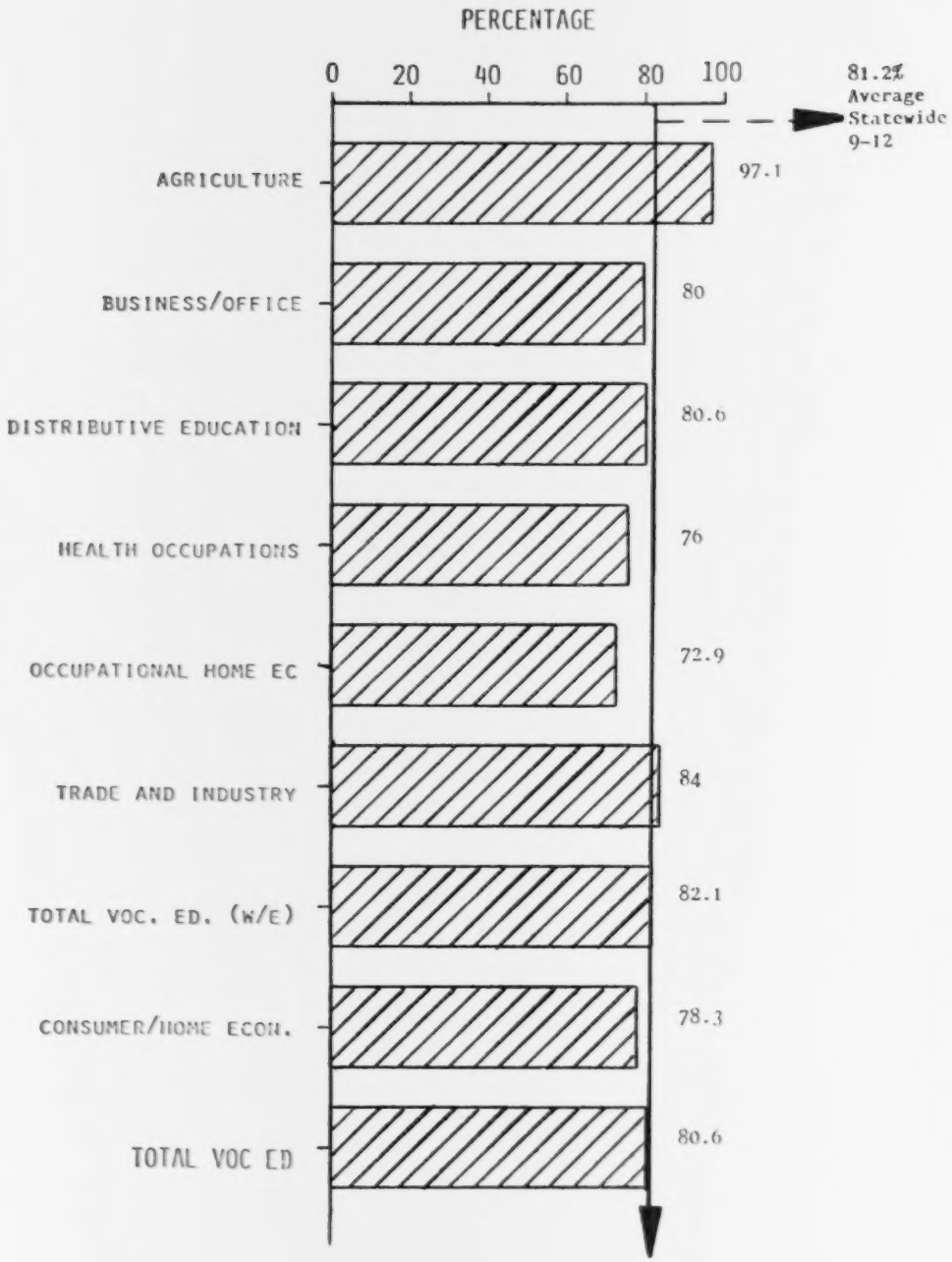
AMERICAN INDIAN STUDENT ENROLLMENT
BY VOCATIONAL EDUCATION PROGRAM AREAS
1984-85



ASIAN AMERICAN STUDENT ENROLLMENT BY VOCATIONAL EDUCATION PROGRAM AREAS (1984-85)



WHITE STUDENT ENROLLMENT BY VOCATIONAL EDUCATION PROGRAM AREAS (1984-85)



Chapter II

"The Status of Postsecondary Student's Accessibility to Vocational Education Including Gender and Racial/Ethnic Composition"

A review of postsecondary enrollment data, which was currently available from the Michigan Department of Education, was conducted by State Advisory Council for Vocational Education. Information and data was also reviewed from the "Report on Minorities, Handicappers, and Women in Michigan's Colleges and Universities -- State Superintendent's Special Advisory Committee" Niara Sudarkasa, Chair (1986).

Background

On January 11, 1984, the State Board of Education adopted the "Better Education for Michigan Citizens: A Blueprint for Action."[5] Contained in the "Blueprint" was the recommendation that the State Superintendent work with colleges, universities and others to develop a plan of action to implement the recommendations of the Joint Task Force on Minorities, Females and Handicappers in Michigan Colleges and Universities. In the Fall of 1984, Dr. Phillip Runkel appointed a special committee of state educators and concerned citizens to identify ways of improving access to Minorities, Handicappers and Women to Michigan's institutions of higher learning. The committee chaired by Dr. Niara Sudarkasa, Associate Vice President for Academic Affairs, the University of Michigan, held its first meeting in January 1985. On April 9, 1986, the 20-member committee presented their report, with twelve significant recommendations on the issues of recruitment and admission, retention and graduation for minorities, handicappers and women in Michigan's public institutions of higher learning, to the State Board of Education.[6] The pertinent information relating to community colleges from this report will be referenced in the appropriate sections in this Chapter.

Procedure

As with Chapter I, the State Plan Committee of the State Advisory Council for Vocational Education started with the mission and goals in the 1986-88 State Plan for Vocational Education (see Page 2). As stated in Chapter I, there were no measurable criteria for the mission or goals to determine progress, success or lack of success. Therefore, the available data is compared from year to year and/or for trends. It should be noted at this point that the style in which the conclusions are presented in this Chapter is one of inquiry rather than declaration. The rationale is that the K-12 educational system is compulsory, whereas postsecondary education is elective and the students pay tuition.

Review of Data

In order to determine the status of Postsecondary Student Accessibility to Vocational Education, the data was broken down into five areas:

1. Enrollments: Number of postsecondary students served by occupational education.

2. Geographical: Number of students served by the 29 junior/community college plus Ferris State, Northern Michigan and Lake Superior which serve their areas as community colleges.

3. Program Offerings: Number of students served in the 30 occupational areas.

4. Gender: Number of male and female students served.

5. Racial/Ethnic Background: Number of American Indian, Asian American, Black, Hispanic and White students served.

Note: **The most current complete data available when the review commenced was based on the 1985 school year. Where comparisons or exceptions occur, the year(s) will be identified. The total postsecondary enrollment data is taken from the HEGIS Fall Enrollment Report which is a head-count taken on one given day of the year. The postsecondary occupational enrollment data is from Part A of VEDS and is an accumulation of unduplicated enrollments for the year. This system includes any students that enroll during any quarter or semester during the year. These figures are all based on head-counts and include any individual enrolled for one credit or more and do not include their equivalency to that of a full-time student. The following are abbreviations used in the report:**

Total Postsecondary = Occupational + Liberal Arts Enrollments in two year public colleges

Occupational = Vocational

Postsecondary Occupational Education Enrollments

Facts and Findings: (See Graph A, page 33)

- o 66%* of Michigan community college students were enrolled in an occupational education program (135,541).

- o .1% decline in total enrollments of public two-year community colleges (290).

- o 3.0% increase in community college students enrolled in an occupational education program (3,610).

*66% is inflated since it includes accumulated headcount for occupational education and the community college enrollments are not accumulated.

Conclusions

Occupational education enrollments are increasing slightly as the total enrollments of public two-year community colleges are being maintained. The number of community college students enrolled in an occupational program has increased significantly in the past fifteen years.

Since there has not been any criteria established in the State Plan on a target population to be served by vocational education, should one be set for postsecondary vocational education? Does the philosophy of a community college affect the proportion of students served by occupational education, i.e., two year transfer programs as their primary mission?

Postsecondary Occupational Education Enrollments by Geographical Location

Facts and Findings: (See Chart B, page 34)

- o 93.0% is the highest percent of occupational education students served by any community college (Lake Michigan).
- o 20.0% is the lowest percent of occupational education students served by any community college (Muskegon).
- o 73.0% is the range between the community college serving the highest and lowest percent of occupational education students.
- o 66.0% is the statewide average of community college students served by occupational education.
- o 9 community colleges serve students in occupational education above the statewide average.
- o 18 community colleges serve students in occupational education below the statewide average.

Note: Two of the twenty-nine community colleges operate on quarters rather than semesters. Therefore, they are not included in this data or in Chart B.

Conclusions

There is a significant difference in the percent of postsecondary students served by occupational education based on geographic location -- a range of 73% from high to low. Why is there such an extreme variance? Is the variance based on a community college's philosophy or mission?

Postsecondary Occupational Education Enrollments by Occupational Area

Facts and Findings: (See Chart C, page 35)

- Thirteen of the 30 occupational areas had an increase in enrollment (43%).
- The largest increase in percentage was 108.91% in Parks and Recreation. There were 101 students in 1984 and 211 in 1985.
- The largest decline was 97.4% in Industrial Arts. There were 77 students in 1984 and only 2 in 1985.
- The category identified as General had the largest increase in number of students - 6,629. The second largest increase was in Vocational Home Economics - 3,660.
- Health had the largest decrease in number of students - 1,995 and Health Sciences the second largest decrease of 1,871 students.

Conclusions

Statewide enrollment data would indicate that postsecondary occupational education was increasing at a slightly higher rate than the total postsecondary enrollment. However, seventeen (17) of the occupational areas out of thirty had a decreased enrollment. Those occupational areas with significant enrollment declines should be targeted for immediate study and appropriate steps taken based on the results of the assessment.

Postsecondary Occupational Education Enrollments by Occupational Area and Gender

Sudarkasa Report -- Women

"Following national trends, female enrollment in institutions of higher education in the State of Michigan has increased in the past thirteen years. The number of women enrolled in institutions of higher education in Michigan grew from 159,000 in 1970 to 270,000 in 1983, a 70% increase. In contrast, male enrollments increased only 6%, from 234,000 in 1970 to 247,000 in 1983, with a noticeable decline since 1975. As a proportion of total enrollments, women's representation grew from 40% in 1970 to 52% in 1983. Most of the growth of female enrollments is attributed to the increased participation of women 25 years or older, the non-traditional female student. These include minority women; displaced homemakers who normally lack job skills, education and work experience to be competitive in today's job market; single parents; and older women who return to higher education to prepare for employment, as well as for personal enrichment.

In the two-year public colleges female enrollment increased between 1980 and 1984 from 49.6% of their total student body to 55.6%. This 1984 figure for community colleges is higher than the corresponding one for either the major research universities or other four year colleges and universities. In other words, the proportion of women in higher education in Michigan has increased in the past four years, but it has been the community colleges that have experienced the greatest increments."

Facts and Findings: (See Graph D, page 36)

- The enrollment of males and females in occupational education appears to be balanced. Total occupational enrollment has 46.8% males and 53.2% females.

- However, the general appearance of balance by gender may be due to the fact that the occupational areas balance each other out. Twelve of the occupational areas are considered in-balance and eighteen are out of balance, i.e., have less than 75/25 ratio.

- T/I has a 95.5% male population, Mechanics and Repairs has a 95% male enrollment followed by Engineering and Related Technical with a 90.9% male enrollment.

- Consumer Personal Services has a 94.6% female enrollment, Home Economics has a 93.1% female population and Health Services has a 92.1% female enrollment.

Conclusions

The gender composition of the total postsecondary occupational enrollment appears to be in-balance. However, twelve (12) of the occupational areas are in balance and eighteen (18) are out. Specific occupational areas may need to be targeted for additional assistance.

The targeted funds for "students in non-traditional programs" identified in Chapter III could impact this situation, however only 450 such non-traditional students, compared to an enrollment of 140,000, received services at the postsecondary level last year. At that rate progress will not be evident for many years.

Postsecondary Occupational Education Enrollments by Occupational Area and Race

Sudarkasa Report - Minorities

"In the State of Michigan, as in the country as a whole, most of the minorities in higher education are enrolled in community colleges. In 1976, 44.4% (27,611) of all minority students enrolled in higher education in the State of Michigan (62,142) were enrolled in community colleges. In 1984, 42.9% (25,562) of all the minorities (59,543) in higher educational institutions were in community colleges. The high point of minority

enrollment in community colleges was 1976, when they comprised 15.7% of the total. By 1982 that enrollment had dropped to 10.3%. In 1984, the percentage of minorities in community colleges stood at 12.5%. Thus, even though community colleges still enroll more minorities than do the four-year public universities (other than Wayne State University), these enrollments have also dropped significantly between 1976 and 1985. With the exception of Asian Americans, minority enrollment decrements are evident for all minority groups in community colleges. Black enrollment in community colleges dropped 18% between 1980 and 1984; Hispanic enrollment dropped 35% in the same period, and Native American enrollment declined 22% in those four years. Overall enrollments in community colleges declined only 2.2% between 1980 and 1984. These statistics show the fallacy in the common assertion that minorities are 'over-represented' in community colleges. The downward trend in community college enrollment of minority students also demonstrates that there is no segment of higher education in the State of Michigan where low minority enrollment is not a matter for urgent redress.

The number of students enrolled in vocational-technical programs in community colleges has significantly increased over the past decade and a half. At Jackson Community College, for example, 50% of the students are presently enrolled in vocational-technical programs; at Mott 65% are enrolled in these programs (compared to 35% in 1970); and at Grand Rapids Junior College 40% are now in vocational-technical programs.

Community colleges serve the dual purpose of providing vocational training normally accomplished within the two-year period, as well as providing an entrance bridge to four-year institutions offering Baccalaureate degrees. Because of the type of students served by community colleges and because of the nature of their programs, these institutions have some unique problems in seeking to provide educational opportunities for minorities. 'Success' in the community college setting can have a different meaning than at four-year colleges. Many students select courses to meet immediate needs (e.g., upgrading job skills) without concern for the attainment of certificates or degrees as credentials. At the same time, many liberal arts students transfer to four-year colleges and/or universities without completing degree requirements. Even though these students are 'successful' by their own definition, statistically they would appear as not having successfully completed any program. Measurement of the attrition rate is also complicated by the fact that many students drop out of school only to enroll again at some future date. The failure to graduate is more prevalent among minorities than among majority students, and is present in both the associate degree programs as well as in the transfer track category. One reason for the minority student drop-out rate is that minority students, in contrast to majority students, come with greater deficiencies in reading and writing skills, and with less specific academic plans."

Note: Statewide minority enrollment data in postsecondary institutions is collected every other year. Therefore, the 1985 occupational education minority data is being compared to 1986 total postsecondary minority data. However, in most instances the total minority data does not change significantly over a one year period.

Facts and Findings: (See Graph E, page 37)

- o In 1986 minorities comprised 14.1% of the statewide postsecondary population.
- o In 1985, minorities comprised 13.6% of the statewide postsecondary occupational education enrollment.
- o Asian-Americans represent 1.0% of the statewide postsecondary population and 0.8% of occupational education enrollment.
- o American-Indians represent 0.9% of the statewide postsecondary population and 0.8% of the occupational education enrollments.
- o Hispanics represent 1.3% of the statewide postsecondary population and 1.4% of the occupational education enrollment.
- o Blacks represent 10.4% of the statewide postsecondary population and 9.9% of the occupational education enrollment.
- o Whites represent 86% of the total statewide postsecondary population and 86.4% of the occupational education population.

Occupational Education Enrollments by Content Area by Race

Facts and Findings:

Black Students (See Graph F, page 38)

1. Black students make up 9.9% of the occupational enrollment which is 0.5% less than the statewide postsecondary population.
2. Eight of the twenty-nine (27.6%) occupational areas served a higher proportion of Black students than is represented in the statewide postsecondary population. Architecture and Design serves the highest proportion of Black students (23.6%).
3. Two of the occupational areas: Renewable Natural Resources and Vocational Home Economics served 0.0% of the Black population.

Hispanic Students (See Graph G, page 39)

1. Twelve out of twenty-nine occupational areas served a higher proportion of Hispanic students than is represented in the statewide postsecondary population. Parks and Recreation (4.2%) and Science Technologies (4.0%) served a significantly higher proportion of Hispanic students.
2. Seven of the occupational areas served no Hispanic students.

American Indian Students (See Graph H, page 40)

1. Nine out of twenty-nine occupational areas served a higher proportion of American Indian students than is represented in the statewide postsecondary population. Architecture and Design served the highest proportion of American-Indian students (4.3%).

2. Six of the occupational areas served no American Indian students.

Asian American Students (See Graph I, page 41)

1. Six out of twenty-nine occupational areas served a higher proportion of Asian American students than is represented in the statewide postsecondary population. Parks and Recreation served the highest proportion of Asian American students (2.5%).

2. Six of the occupational areas served no Asian American students.

White Students (See Graph J, page 42)

1. White students make up 86.4% of the occupational education enrollment which is above the statewide postsecondary population (86.0%).

2. Nineteen out of twenty-nine occupational areas served a higher proportion of White students than is represented in the statewide postsecondary population. Two of the areas: Renewable Natural Resources and Industrial Arts served the highest number of White students (100%).

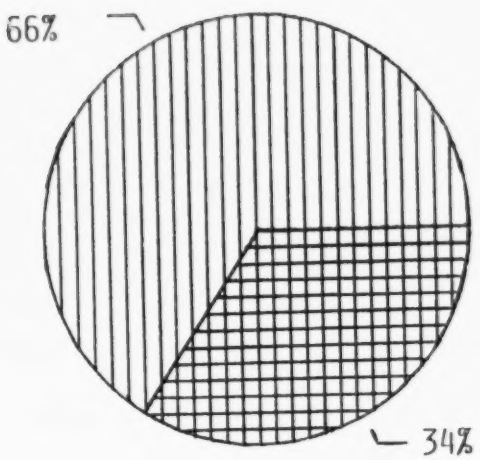
3. Nine of the occupational areas served a lower proportion of White students than the statewide population with Health Sciences being the lowest (59.8%).

Conclusions

Postsecondary occupational education is only serving one half of one percent fewer minorities than are being served by the total community college population. However, as pointed out in the 1986 Sudarkasa Report, although the minorities graduating from high school in the State of Michigan have increased, there has been a dramatic drop of all minorities enrolling in higher education institutions.

Those occupational areas which are significantly serving a higher/lower proportion of a minority population should be targeted for further study to determine the factors affecting the situation.

PROPORTION OF OCCUPATIONAL EDUCATION ENROLLMENT TO TOTAL COMMUNITY COLLEGE ENROLLMENT* (1985)



OCCUPATIONAL EDUC
135,541

NON OCCUP EDUC
69,508

*66% is inflated since it includes accumulated headcount for occupational education and the community college enrollments are not accumulated.

PERCENT OF POSTSECONDARY STUDENTS SERVED BY
OCCUPATIONAL EDUCATION IN EACH COMMUNITY COLLEGE
1985

Percent Increments	Community College	Occup. Ed. Enrollment	Actual Percent Served
Above 90%	Lake Michigan	3,141	93%
89 - 80%	Macomb	25,855	88%
79 - 70%	Monroe	2,243	77%
	Southwestern	1,782	72%
	St. Clair	2,496	71%
69 - 60%	Mid-Michigan	1,267	69%
	Jackson	4,019	67%
	Glen Oaks	786	67%
	Alpena	1,198	66%
	Schoolcraft	5,469	65%
	Kalamazoo	5,465	65%
	Highland Park	1,317	63%
	Gogebic	835	63%
	Kellogg	2,677	62%
	Bay De Noc	1,154	61%
	Kirkland	866	61%
59 - 50%	West Shore	629	59%
	C. S. Mott	5,706	56%
	Delta	5,580	54%
	Wayne	6,354	52%
	Washtenaw	4,198	52%
	Oakland	13,327	50%
49 - 40%	Henry Ford	7,570	49%
	Grand Rapids	3,889	40%
39 - 30%	North Central	534	35%
29 - 20%	Montcalm	425	25%
	Muskegon	1,022	20%

Lansing Community College and Northwestern Michigan College are not included since their enrollments are based on quarters rather than semesters, as are the other 27 community colleges.

Computations are based on Part A Enrollments from Postsecondary VEDS and the HEGIS Fall Enrollment Report.

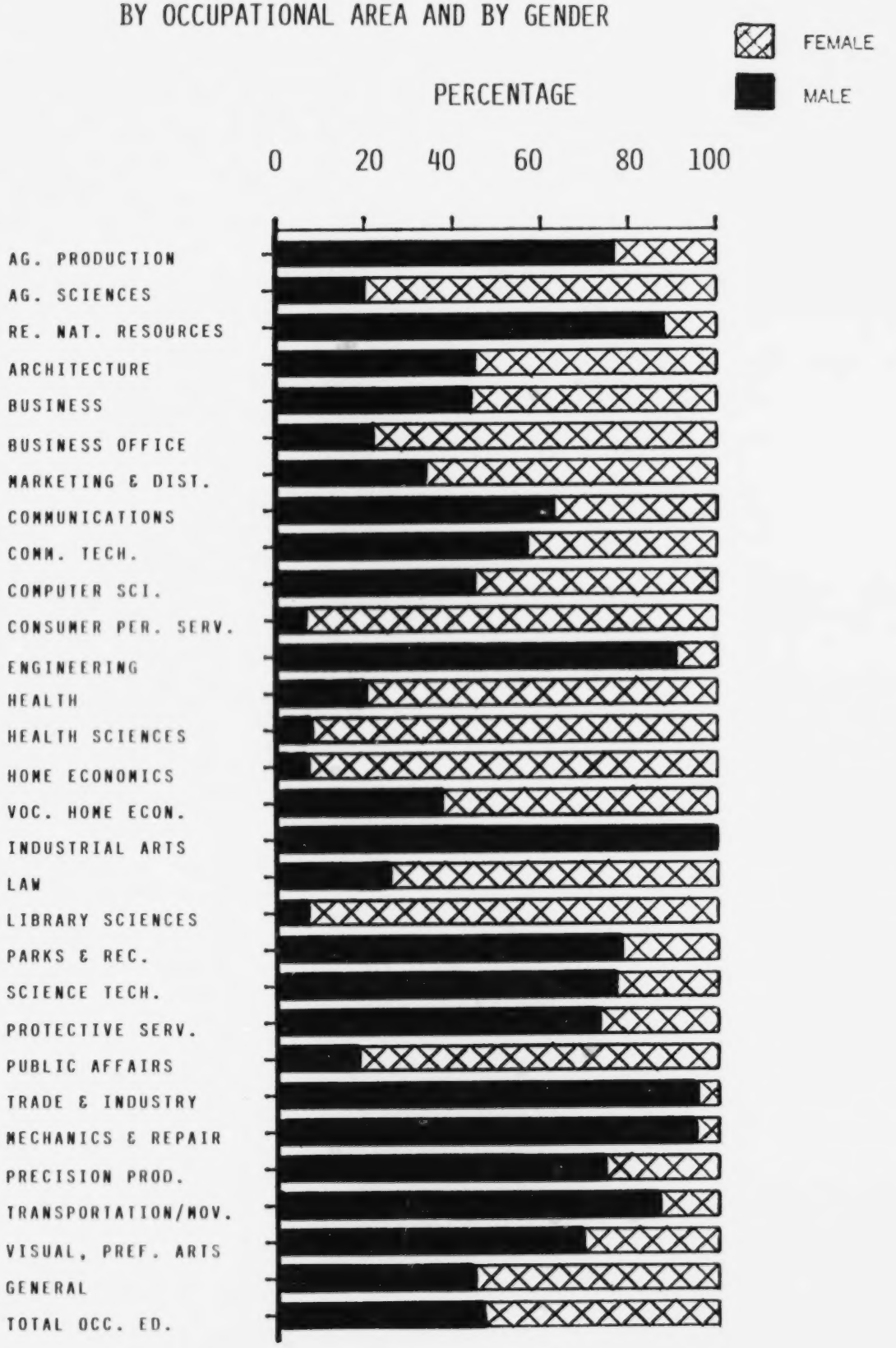
OCCUPATIONAL PROGRAM ENROLLMENT
STATE OF MICHIGAN POSTSECONDARY SUMMARY
BY OCCUPATIONAL AREAS
1982-85

Code	Occupational Area	1984	1985	1985-84 Change	Percent Change
01	Agriculture Production	270	326	56	20.74
02	Ag. Sciences	3	15	12	400.00
03	Renewable Nat. Resources	85	28	-57	-67.06
04	Architecture/Design	137	153	16	11.68
06	Business	21754	22664	910	4.18
07	Business Office	30422	29471	-951	-3.13
08	Marketing & Distribution	3078	3633	555	18.03
09	Communications	32	37	5	15.63
10	Communications Tech.	1838	1819	-19	-1.03
11	Computer & Information Sci.	14342	12583	-1759	-12.26
12	Consumer, Personal Services	269	374	105	39.03
14	Engineering	128			
15	Engineering & Related Tech.	21787	20937	-850	-3.90
17	Health	17429	15434	-1995	-11.45
18	Health Sciences	15216	13345	-1871	-12.30
19	Home Economics	1810	1754	-56	-3.09
20	Vocational Home Econ.	5840	9500	3660	62.67
21	Industrial Arts	77	2	-75	-97.40
22	Law	1039	1302	263	25.31
25	Library Sciences	56	43	-13	-23.21
31	Parks & Recreation	101	211	110	108.91
41	Science Technologies	214	248	34	15.89
43	Protective Services	4788	5366	578	12.07
44	Public Affairs	1061	1051	-10	-.94
46	Trade & Industrial	1028	940	-88	-8.56
47	Mechanics & Repairers	6752	7848	1096	16.23
48	Precision Production	6174	7988	1814	29.38
49	Transportation/Moving	890	872	-18	-2.02
50	Visual & Performing Arts	1614	1675	61	3.78
00	General	6796	13425	6629	97.54
	TOTALS	165030	173044	8014	4.86

Source: Michigan Department of Education Community College Services Unit - Postsecondary VEDS

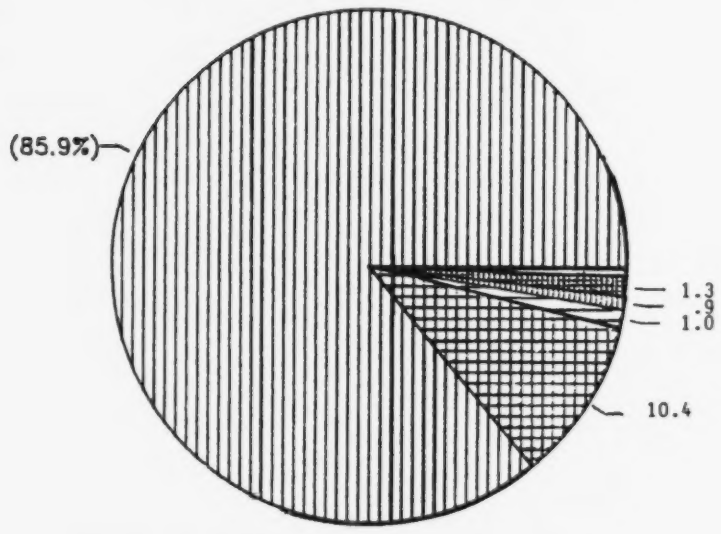
Graph D

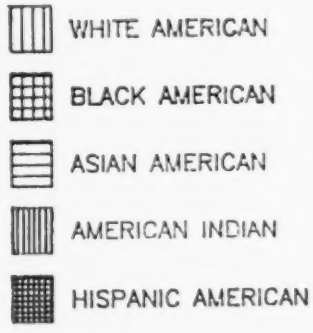
POSTSECONDARY ENROLLMENTS BY OCCUPATIONAL AREA AND BY GENDER



COMPARISON OF MINORITY ENROLLMENTS IN OCCUPATIONAL EDUCATION TO MINORITY ENROLLMENTS IN COMMUNITY COLLEGES

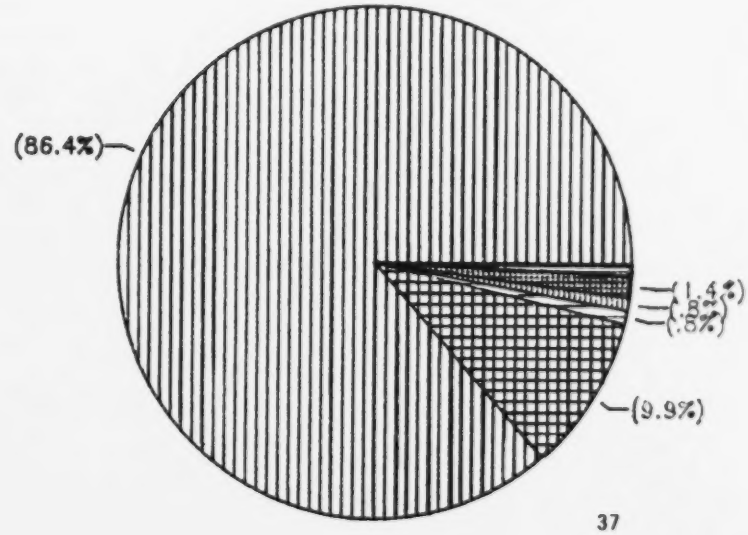
TOTAL MINORITY ENROLLMENT IN COMMUNITY COLLEGES 1986*



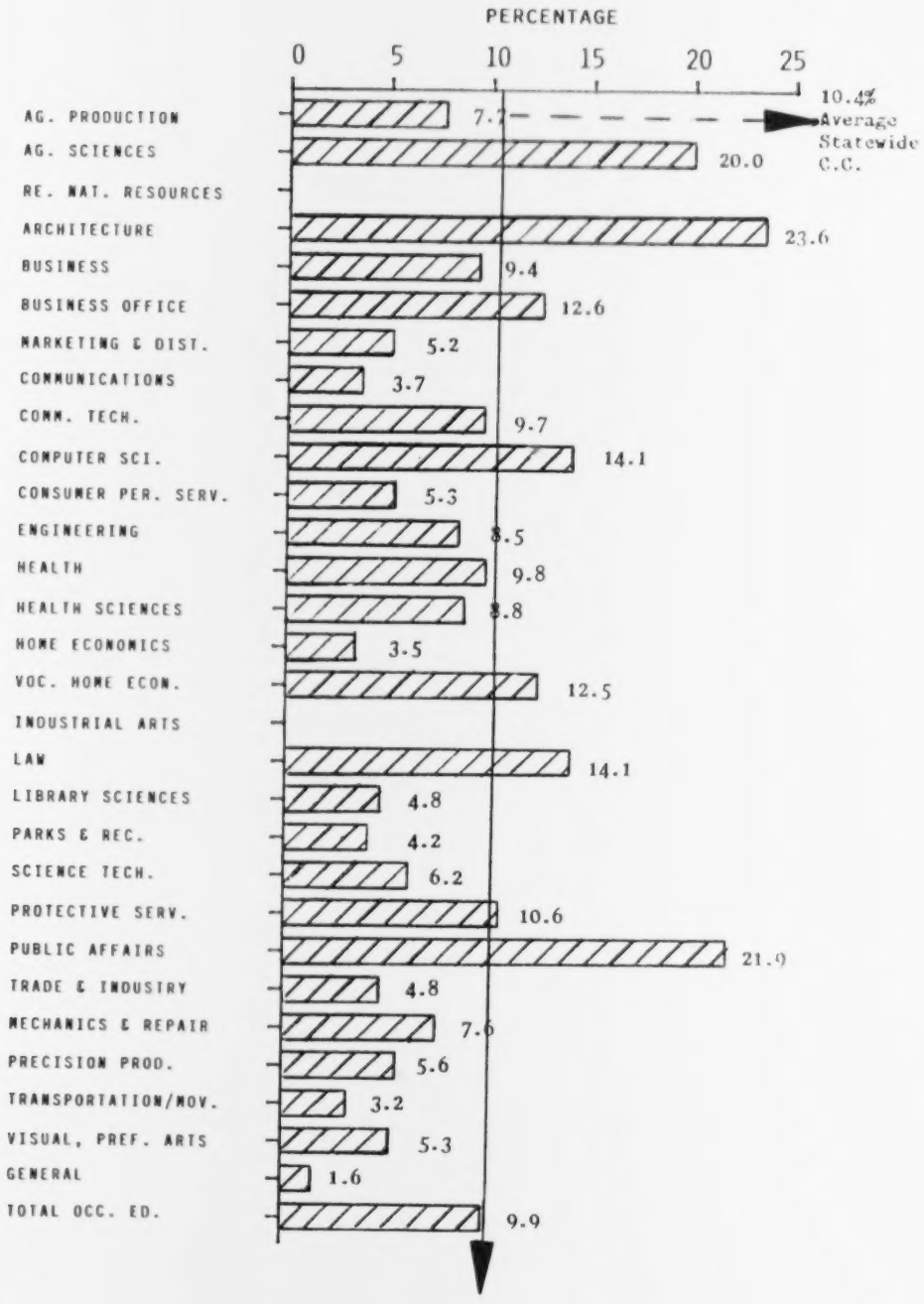


* DATA NOT AVAILABLE IN 1984-85

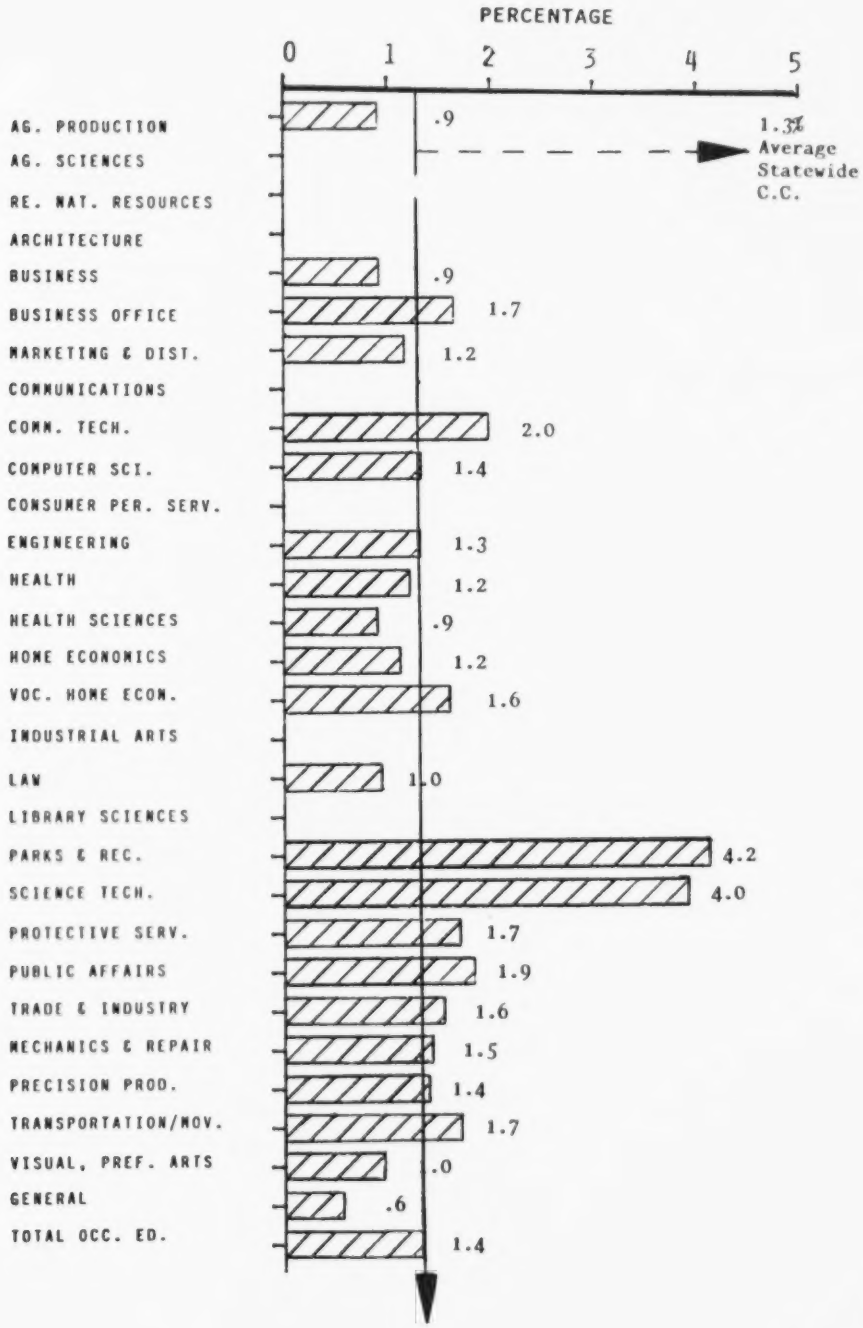
TOTAL MINORITY ENROLLMENT IN OCCUPATIONAL EDUCATION 1985



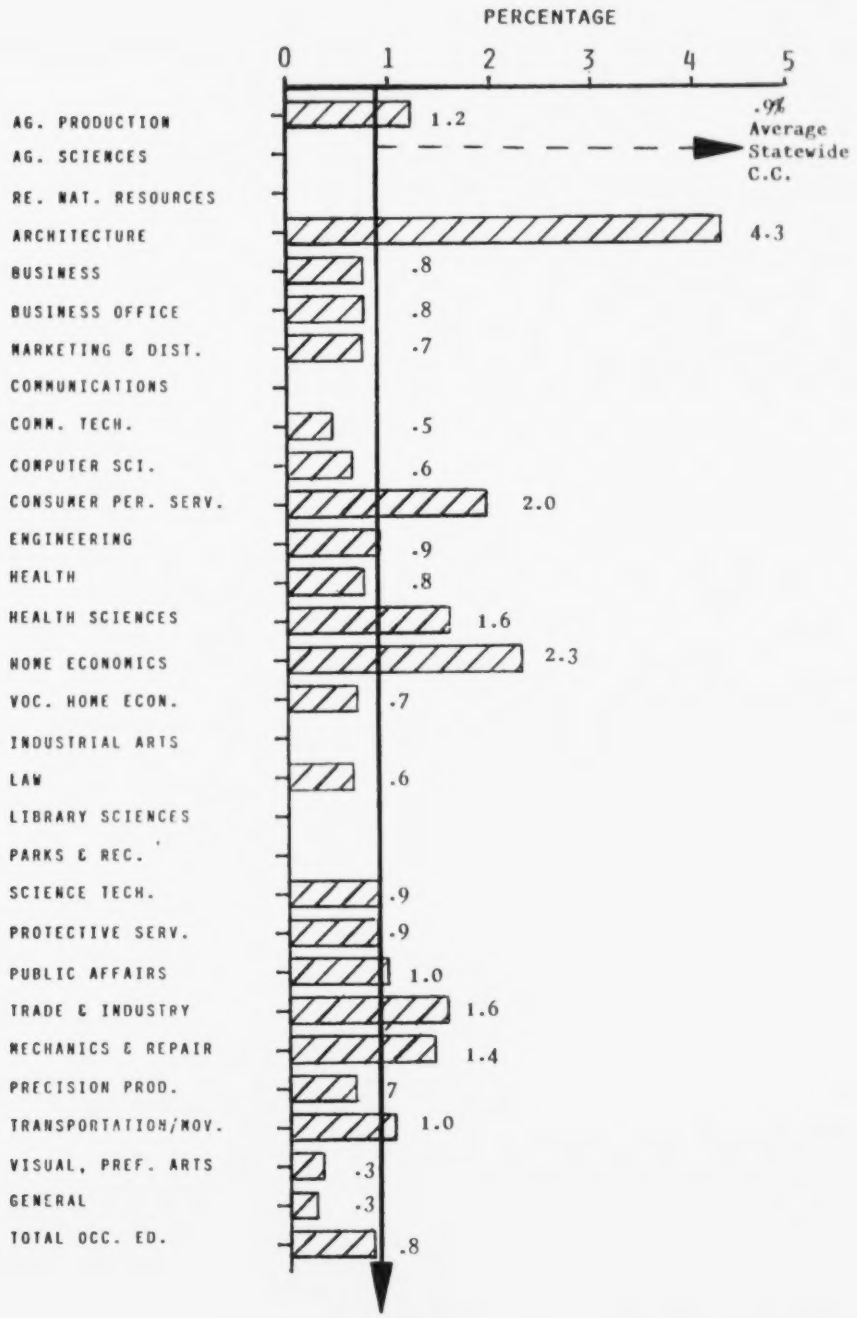
PERCENTAGE OF BLACK POSTSECONDARY ENROLLMENT BY OCCUPATIONAL AREA (1985)



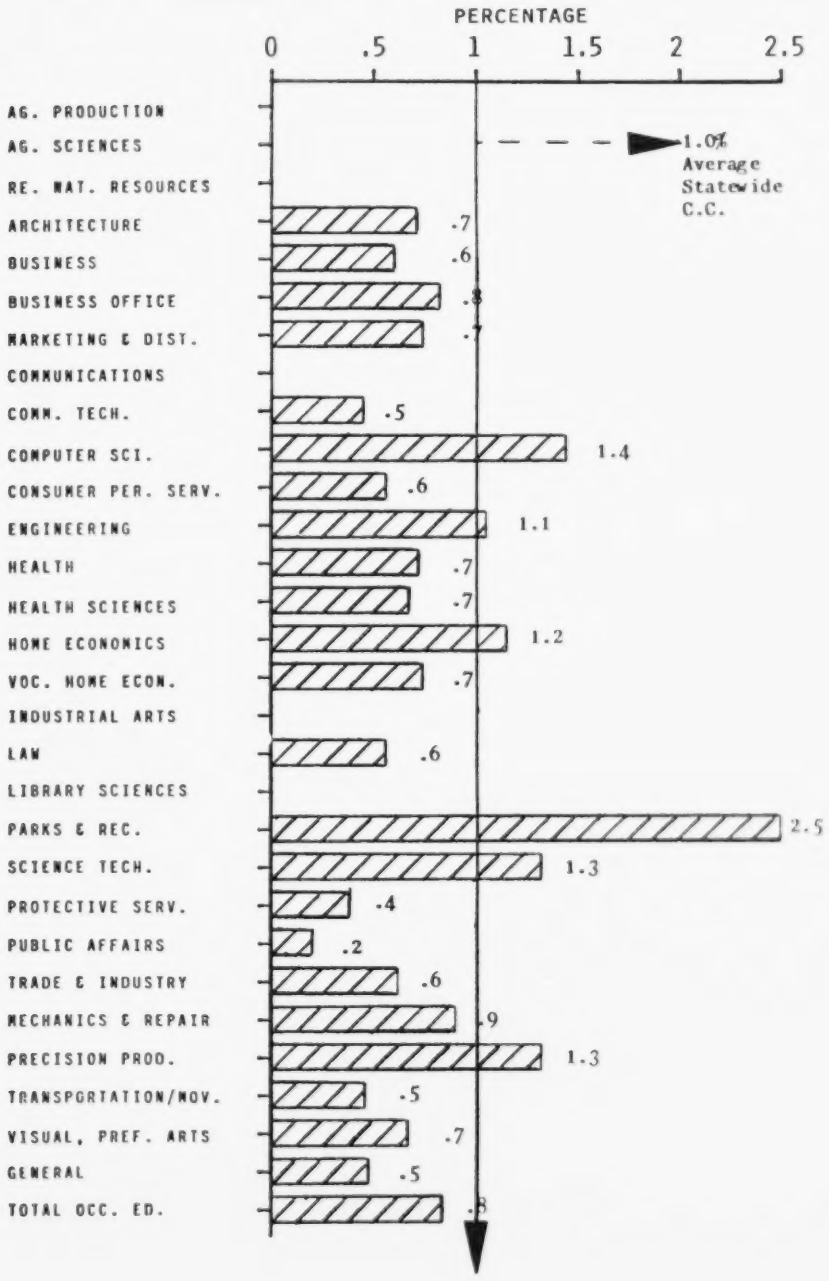
PERCENTAGE OF HISPANIC POSTSECONDARY ENROLLMENT BY OCCUPATIONAL AREA (1985)



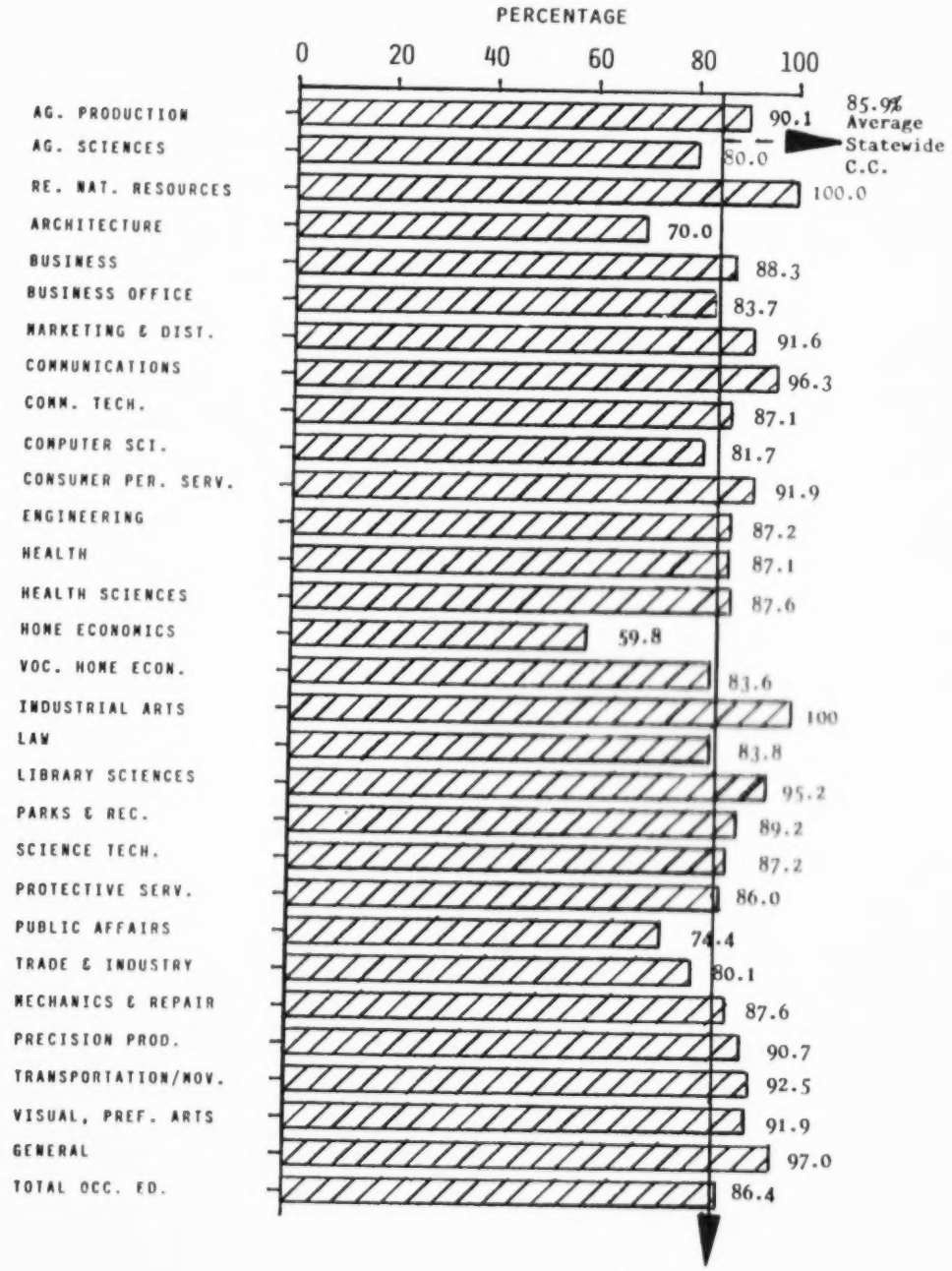
PEPCENTAGE OF AMERICAN INDIAN POSTSECONDARY ENROLLMENT BY OCCUPATIONAL AREA (1985)



PERCENTAGE OF ASIAN AMERICAN POSTSECONDARY ENROLLMENT BY OCCUPATIONAL AREA (1985)



PERCENTAGE OF WHITE POSTSECONDARY ENROLLMENT BY OCCUPATIONAL AREA (1985)



Chapter III

"The Status of Special Populations Served by Secondary and Postsecondary Vocational Education"

The Carl D. Perkins Act of 1984 (P.L. 98-524) emphasizes the need to provide access and services to targeted populations and is much more prescriptive then the previous Vocational Education Act. For this reason, the data on these populations from previous years cannot be compared with 1985-86 data. However, the 1985-86 data will be used as the base year against which progress can be measured in the future. The Council has every intention of conducting a follow-up study to determine the accessibility of special populations to vocational education.

As with the previous chapters, the data and information reviewed was provided by the Michigan Department of Education, Vocational-Technical Education Services staff, the 1985-86 "Annual Performance Report for Vocational Education," and "The Status of Men and Women in Vocational-Technical Education in Michigan 1983-86" draft #1.

The Perkins Act requires fifty-seven percent (57%) of the Title II funds be distributed among programs for the following special populations: handicapped 10.0%; disadvantaged 22.0%; adults 12.0%; single parents or homemakers 8.5%; students in non-traditional programs 3.5%; and criminal offenders 1.0%.

Handicapped

Many handicapped persons are capable of succeeding in the regular vocational program with the provision of special services and/or assistance. Services provided for handicapped persons include, but are not limited to: interpreters for the deaf; readers for the blind; learner station modifications; instructional tool and equipment modification; and assessment of aptitude; interest and abilities.

1985-86	Handicapped
Secondary	
- Students Served	6,464
- Federal Funds	$2,581,266
Postsecondary	
- Students Served	1,860
- Federal Funds	$ 714,687
TOTALS	
- Students Served	8,324
- Federal Funds	$3,295,953

Disadvantaged

Disadvantaged individuals are also served by regular vocational education programs. Service provided to these students include: assessment of interest, abilities and special needs; and counseling.

1985-86	Disadvantaged (LEP)*
Secondary	
- Students Served	12,167 (598)
- Federal Funds	$ 4,843,895
Postsecondary	
- Students Served	4,956 (434)
- Federal Funds	$ 1,398,178
TOTALS	
- Students Served	17,123 (1,032)
- Federal Funds	$ 6,242,073

*Disadvantaged enrollments include Limited English Proficient (LEP).

Note: Enrollment of Handicapped and Disadvantaged students by program area was not available.

Adult

Adults were served by secondary programs/facilities as part of a pilot set of guidelines. The guidelines emphasized the incorporation of qualitative components such as task-based competency records and linkages with Adult Basic Education Programs where appropriate. These programs served 1,258 adults in 1985-86, 54% were integrated with secondary students and 46% were served in separate sections. A total of 25 educational agencies were involved and $104,050 was used to finance this effort. Evaluations of this pilot indicated a need to significantly modify this approach in the future.

"Quik Start" projects provided customized training for workers in a new and/or expanding industries. They also provided workers for placement in jobs that had a shortage of persons with required skills. Examples of instruction given are Statistical Process Control, Computerized Numerical Control, Welding, Electronic Assembly, Computer Operations, and Machine Repair.

Total of grant awards:	$1,899,031
Total number of trainees:	7,063

Single Parent/Homemakers

The Single Parent/Homemaker Program was administered via competitive applications. All programs had to include ten components: outreach and promotion; assessment of aptitude, interests and special needs; career guidance and personal counseling; independent living skills vocational/occupational

skills training; transportation and child care; job placement; evaluation and follow-up; advocacy committee; and cooperation/coordination efforts.

Eleven K-12 or intermediate districts and six community-based organizations provided services to single parents and homemakers at the secondary level. They served a total of 1,204 persons and spent $593,659. Of the total served, 488 (40.5%) were teen parents, 433 (35.0%) were adult single parents, 41 (3.4%) were homemakers, 102 (8.5%) were displaced homemakers, and 135 (11.2%) were unidentified. Fifty-five (55 or 4.6%) were males, and 1,149 (95.4%) were female. Six hundred ninety-seven (697 or 57.9%) of those served were White, 77 (6.4%) were Hispanic, 340 (28.2%) were Black, 7 (6%) were Asian, 34 (2.8%) were American Indian, and 49 (4.1%) were of unknown origins. The average age was 23. The average educational level completed by the persons served was 10.9 and they averaged 1.4 children each.

A key to the success of single parents and homemakers, identified in the Carl D. Perkins Vocational Education Act of 1984 was the provision of child care and transportation. Two hundred fifty-seven of 1,022 who had access to child care or (25%) received assistance from the grant monies and 449 of 1,042 who had access to transportation or (43%) received assistance.

In many cases, the single parent or homemaker comes to the support program with very low skill levels. In order to assure success in vocational training, pre-vocational education experiences might be provided. Of 826 persons who had pre-vocational education available, 168 (20%) were placed in pre-vocational educational experiences during the first year. Also because of low achievement in the basic skills of reading, writing, and mathematics, basic skill training was also available for 1,058 of the persons served, of this number 466 (44%) were enrolled in basic skills training courses during 1985-86.

The placement into vocational education programs was the primary goal of the single parent and homemaker program, second only to the ultimate goal of economic independence of the single parent or homemaker. The reports from the projects at the end of the first year were encouraging. They indicate that 180 (15.0%) of the single parents or homemakers who received services left the project prior to placement in a training program. Of the remaining 1,024 left to receive services, 323 (31.5%) were placed in vocational education programs or were enrolled for the Fall of 1986. Eighty-four (84 or 8.2%) were placed in postsecondary programs to meet the need of the individual's educational development goals, 118 (11.5%) were assisted with employment, based on already acquired skills or immediate need for income (some of these placements were in jobs supported by Job Training Partnership Act), and 499 (48.7%) were not ready for placement into vocational training programs.

Programs provided at the postsecondary level include tuition free occupational education and the ten program components, previously identified, were made optional rather than mandatory.

The final report for the 1985-86 fiscal year showed a total of 7,328 persons served. Of that total, 305 were reported to participate in career guidance courses only, and 4,375 were reported to received services but

were not eligible for tuition reimbursement. It is unclear whether these persons were served with single parent and homemaker dollars or with sex equity dollars. It is clear that 2,648 persons who qualified as single parents or homemakers received tuition assistance. Of those which can be identified as receiving tuition assistance, 1,227 (46.3%) were single parents, 641 (24.2%) were homemakers and 780 (29.5%) were displaced homemakers.

Students in Non-Traditional Programs

In 1985-86, as a result of the implementation of the Carl D. Perkins Vocational Education Act of 1984, the sex equity program at the secondary level was changed from activities and technical assistance on reducing bias and stereotyping to an incentive program. This incentive program provided $150 to educational agencies, per non-traditional student who successfully completed one year of training in a "traditional" program.

All school districts that provided vocational education programs were eligible for the non-competitive incentive grants. During the 1985-86 school year, thirty-six school districts or consortiums of school districts participated. Ten districts applied for and received planning grants, totaling $19,000 and thirty-two districts received incentive dollars based on their non-traditional enrollments.

The final reports from these districts indicate a total of 543 males and 818 females were enrolled in vocational education programs which were non-traditional for their gender. In addition they reported that 450 (55%) of those females successfully completed the year in their chosen program. Successfully completed was defined as completing the course with a passing grade in the class.

At the postsecondary level, the sex equity dollars are distributed on a formula basis. The basis for the formula is the number of students enrolled in the college, so that each of the twenty-nine colleges have the opportunity to participate in proportion to their size relative to the other colleges in the state.

The purpose of this program was to fund eligible community colleges to support and promote the implementation of adult and postsecondary plans for recruiting females and males into occupational programs/courses considered non-traditional for their sex by providing support services including, but not limited to career guidance, recruitment, and counseling.

The community college allocation for sex equity could be used to fund any or all of five components, i.e., tuition reimbursement, promotional materials, coordination activities, etc. A total of 139 males and 312 females received services as non-traditional students.

Funds available to the secondary level to support the activities described above total $599,578 and the dollars available to the postsecondary level to support the activities described above total $223,192.

Criminal Offenders

One hundred forty-two (142) secondary incarcerated youth were provided with the same services as other students with special needs. The Department of Corrections was also assisted with curriculum development activities to provide for improved programs for incarcerated youth at the secondary level. Six community college projects served 1,918 incarcerated persons, providing equipment, instructional costs and support staff.

Conclusions

The 1985-86 data is being used as the base year from which to make future comparisons so conclusions will not be delineated at this time. However, the State Advisory Council for Vocational Education does choose to make some comments and raise some questions based on their perusal of this data.

It appears that only a limited number of individuals are being served in any of the special population categories. For instance, the handicapped population is only 4% of the total secondary enrollments and only 1% of the postsecondary enrollments. Are these the total number of handicapped individuals needing services? The present system used by special education to report special education students by diagnostic category, age and primary placement, or the way the age group is categorized, does not allow secondary vocational education to determine the population available for services.

> According to the Sudarkasa Report:
>
> "Data from the National Center for Health Statistics estimates that 900,000 Michigan residents are handicappers, at least ten percent of the population. Of these 900,000, approximately 140,000 are in the K-12 school age group (5-17 years) while 50,000 are in the postsecondary age group of 18-22 years. It is estimated that less than 5% of all 18-22 year old handicappers are known to be attending a public college or university in this state compared with approximately 30% for all residents aged 18-22.
>
> As already mentioned, reliable statistics regarding handicappers in Michigan's public colleges and universities are not centrally available. Data from Michigan State University suggest that the number of handicappers in four-year colleges and universities, while increasing, is still much smaller in proportion than in the primary and secondary schools."

A uniform, collaborative system for collecting data on handicapped students at all education levels should be of high priority at the State level for vocational education, special education, rehabilitation and higher education.

The State Advisory Council for Vocational Education would like to commend the Michigan Department of Education, Vocational-Technical Education Services for their incentive program to serve non-traditional students. The question to be asked is, why only thirty-two districts participated in the incentive program? Once again that is only approximately 4% of all

local school districts. In addition, why were only 450 non-traditional students served at the postsecondary level, when over $220,000 was allotted for this activity?

Similar questions appear to be appropriate for services provided to criminal offenders. Why were only 142 incarcerated youth served by secondary education and almost 2,000 individuals served by postsecondary institutions, when the funds ($253,000) were split equally between both levels? The Council appreciates the fact that 1985-86 was the start-up year for the Perkins' funds and that greater impact and effectiveness should result over a period of time. However, the Council would like answers and/or explanations for the possible inequities described in this section.

Chapter IV

Recommendations

After having the opportunity to review the data, draw conclusions and identify possible inequities the State Advisory Council for Vocational Education developed recommendations which should be implemented if there is to be increased access to vocational education in Michigan. All of the recommendations are based on the full implementation of the Mission and Goal I identified in the State Plan for Vocational Education 1986-88.

> "Persons of all ages in all Michigan communities will have ready access to high quality vocational and technical education which is consistent with their interests and abilities, realistic in the light of actual or anticipated opportunities for gainful employment and which, to the extent possible, is consistent with the State's economic development strategies and specific job needs of employers."
>
> Goal I under this mission states that, "Persons with differing sex, age, racial/ethnic background, socioeconomic disadvantage, limited English proficiency, physical and mental capabilities, and geographical location will have access to vocational-technical education and training or retraining and shall not be excluded from such programs because of any distinguishable personal characteristics."

Recommendations

Although progress has been made in Michigan in terms of access to vocational education, there are still extreme variances to that access based on geographic location, gender, racial/ethnic background, handicap, disadvantage, adult, single/parent homemaker, student in a non-traditional program and criminal offender. Therefore, the State Advisory Council for Vocational Education recommends:

1. The State Board of Education validate the twenty-five recommendations provided to them in the Michigan Vocational Education Study Task Force Report and implement those recommendations found to be appropriate for 1987.

2. The State Board of Education should request the appropriate Department of Education's Service Area providing vocational-technical education to conduct periodic evaluations of the statewide vocational-technical program and revise policies to address inequities and/or limitations.

3. The State Board of Education should request the appropriate Department of Education's Service Areas providing vocational-technical education, to conduct statewide studies of the specific program/occupational areas identified as having major inequities and/or limitations based on analysis of statewide data.

4. The State Board of Education should review the present CEPD/ISD and community college delivery system of vocational-technical education for access and equity and require each service area to develop a coordinated long-range plan with annual updates to deliver vocational-technical education (secondary and postsecondary) upon which funding will be based.

5. The State Board of Education should request that the State Legislature require each Service Area (CEPD/ISD) to have a common school calendar.

6. The Vocational-Technical Education Service and the Higher Education Management Service of the Michigan Department of Education should develop an implementation plan including a funding policy for all Council recommendations accepted by the State Board of Education.

The following questions are taken from Chapters I, II and III in this report for which the Council is requesting written responses from the appropriate unit/service in the Michigan Department of Education.

1. Should measurable criterion be established for the goals and activities identified in the "State Plan for Vocational Education?"

2. Should a statewide target population to be served by vocational-technical education be identified for secondary and postsecondary education?

3. Does the philosophy of a school district or community college affect the proportion of students they serve in vocational/occupational education?

4. Why is there such an extreme variance in the proportion of students served by vocational/occupational education based on geographic location?

5. Is this variance affected by the school/college's mission?

6. Are the total number of handicapped students served by secondary and postsecondary vocational-technical education the only ones needing services?

7. Why are only thirty-two school districts participating in the secondary vocational education incentive program for non-traditional students? Should this incentive program also be used at the postsecondary level?

8. Why were only 450 non-traditional students served at the postsecondary level when $220,000 was allotted for this activity?

9. Why were only 142 incarcerated youth served by secondary vocational education and 2,000 individuals served by postsecondary vocational education when the federal funds are split equally?

Bibliography

(1) Contenders, The Inequality of Vocational Education Opportunities for Michigan High School Students - A Research Study, May 1978.

(2) Michigan Vocational Education Task Force, Report: Michigan Vocational Education Study-Task Force, June 1980.

(3) Contenders, page 7.

(4) Michigan State Board of Education, Michigan State Plan for Vocational Education, 1986-88.

(5) Michigan State Board of Education, Better Education for Michigan Citizens: A Blueprint for Action, January 1984.

(6) State Superintendent's Special Advisory Committee, Report on Minorities, Handicappers, and Women in Michigan's Colleges and Universities. Niara Sudarkasa, Chair; 1986.

Notes

Additional copies may be obtained from the State Advisory Council for Vocational Education, Michigan Department of Education, P.O. Box 30008, Lansing, Michigan 48909, (517/373-6407).

Federal vocational education funds provided through P.L. 98-524, the Carl D. Perkins Vocational Education Act of 1984, were used to publish this booklet by the Michigan State Advisory Council for Vocational Education.

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